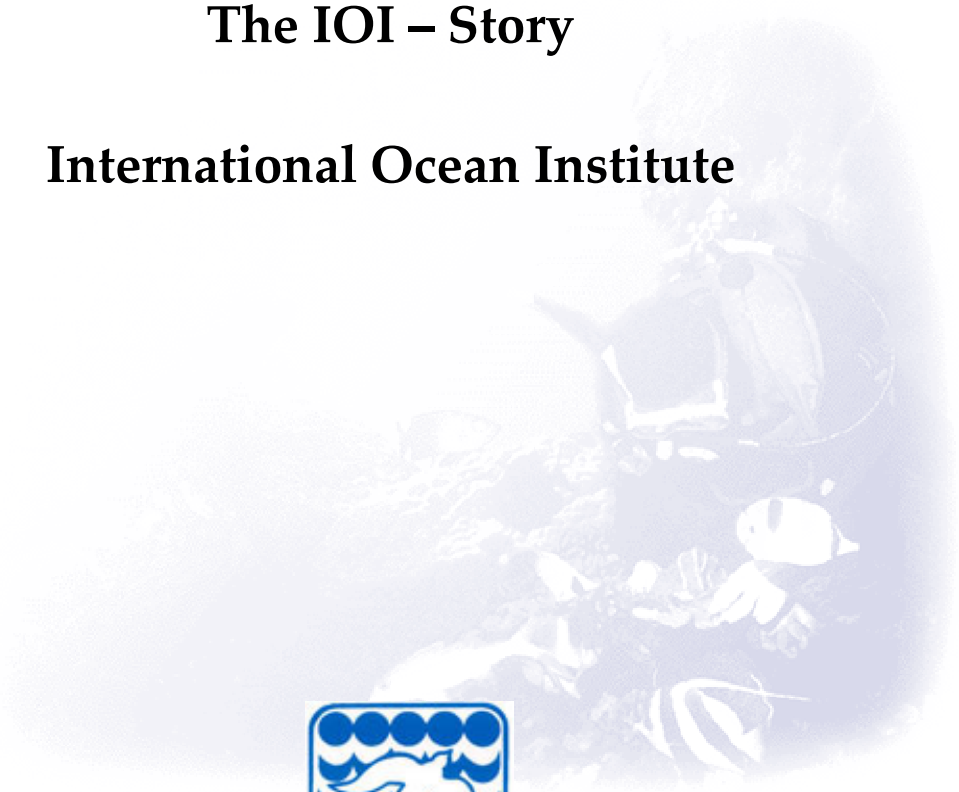
The IOI – Story

International Ocean Institute



Pacem in Maribus

/. *THE BEGINNINGS*

Constitution for the Ocean - Constitution for the World

The story of the International Ocean Institute (IOI) goes back – by coincidence or perhaps not - as far as the story of the United Nations Convention on the Law of the Sea: that is, to the end of World War II. The routes we travelled are different but converge.

Nineteen forty-five was the year President Truman made his famous Declaration on the Continental Shelf and Declaration on the US Fishing Zone. His claim for extended US jurisdiction generated a wave of similar claims on the part of other states, especially in Latin America and Africa, endangering, in the minds of the great maritime powers, the freedom of navigation. Overfishing and the double threat of resource exhaustion and environmental pollution did the rest. This route passed through the United Nations Conferences on the Law of the Sea (UNCLOS I, II, and III) and culminated in the adoption of the United Nations Convention on the Law of the Sea in 1982.

Nineteen forty-five also was the year of the first atomic bombs, which "ushered in the atomic age" as the phrase of that time had it. Nineteen forty-five also was the year of the signing of the UN Charter in San Francisco that was to assure a world freed from the scourge of war - a world of peace, justice and development.

Professors at the University of Chicago, under the leadership of University President Robert M. Hutchins, doubted that the United Nations, structured as it was by the victorious World War II allies and already breeding the virus of the "Cold War" could do the job.

Those professors could be divided into two interacting groups. One consisted of atomic scientists - most of them exiles from fascist European states: Enrico Fermi, Leo Szilard, Edward Teller, and James Franck. It was they who were largely responsible for unleashing the atomic demon through the Manhattan Project and the Stag Field Labs of the University of Chicago. They felt the pangs of conscience. The demon had to be returned to the bottle. Atomic weapons had to be prohibited and destroyed. They inspired, and embraced, the so-called Acheson-Lilienthal Report, prepared by a committee under the chairmanship of David Lilienthal and endorsed by Dean Acheson. A modified version of this report, which became known as the Baruch Plan,

was presented by Bernard Baruch to a meeting of the UN Atomic Energy Commission in June 1946, as the official policy of the US government.

The plan, debated heatedly in the journals of 1946 - especially the Bulletin of Atomic Scientists published at the University of Chicago - made a number of very important points, interesting also for the subsequent development of the Law of the Sea. The plan was to establish an International Atomic Development Authority through which states would collectively own and manage all existing nuclear resources. Nuclear resources could not be owned by any state, institution, or individual. Nuclear resources constituted, in fact - first in the Acheson-Lilienthal Report, later in the European Atomic Energy Agency (EURATOM) - an early version of the Common Heritage of Mankind.

The second interesting concept was that the Authority was to be in control - was, in fact, to manage - both disarmament and development: that is, it was to inspect all facilities and prevent the misuse of nuclear resources for weapons production, and, at the same time, it was to enhance and manage nuclear development for peaceful industrial and medical purposes. The authors of the plan were convinced that it was impossible to prevent a nuclear arms race unless the Authority controlled and managed, directly or by delegation, the peaceful uses of nuclear resources.

This was the first time that a linkage was established between disarmament and development, and it was of a different kind than any contemplated later on. It was in fact embodied in a single institution, albeit one that was not well defined. This takes me to the weaknesses of the plan.

These weaknesses were three: one was structural, the other two, political. Who, concretely, was going to have this formidable power of control over disarmament and development? A dictatorial technocracy? No one anticipated the long years of labour that would be needed – as shown by UNCLOS III - to assure an acceptable and balanced system of participation and decision-making on such issues of global concern.

The political weakness, above all, was that the plan should have been enforced under the threat of the US atomic bomb, the United States being the sole atomic power at the time. Further the plan should have been instrumental in preventing other countries from becoming atomic powers too. This, as it turned out, was unacceptable to the world community.

Last but not least, the atomic scientists were so preoccupied with atomic fear that they tended to forget that there were other issues to be considered. They thought that peace would be safeguarded if only atomic weapons could be controlled.

The other Chicago group did not think so. This second group of University of Chicago professors were humanists and social scientists, political scientists, anthropologists, philosophers, and lawyers, such as G.A. Borgese, Robert Redfield, Richard McKeon, and Mortimer Adier, joined by some scholars from other universities, among them Albert Guerard and Erich Kahler. Their slogan was that the university that had been largely responsible for the splitting of the atom now had the responsibility of putting the world back together. They formed the Committee to Frame a World Constitution, under Robert Hutchins and G.A. Borgese, to develop an ideal blueprint that would correct the weaknesses of the United Nations and would indeed be capable of preventing not only nuclear war, but international war in general, and assure peace through justice. The blueprint, *Preliminary Draft of a World. Constitution,* was published by the University of Chicago Press in 1948. It was translated into 40 languages, including Russian, Chinese, Arabic, and Hindi, and reached a circulation of over a million copies. The Committee also published a journal, *Common Cause,* at the University of Chicago.

The World Constitution contained some basic principles that were Utopian and academic at the time (1948), but their time was to come. Peace in the world, Pacem in terris, the authors argued, was not possible without justice. Pax opus justitiae was their motto, and justice, in the years following World War II, meant decolonization and a new international economic order. The term "New International Economic Order" was not used at that time, but that is what it meant. The arms race was a symptom, not a cause, and the cause was inequality. Thus disarmament had to be linked to development, or it could not happen at all.

But then, there was a further consideration - both Utopian and academic. It was impossible to get international social justice on the basis of the existing concepts of property: the Roman-law concept of property, including the right to use and misuse it. Borrowing, not from red-necked socialism but from none other than the archbishop of Canterbury and his dean, the Reverend Hewlett Johnson, the Constitution established that not only the oceans but water, as well as land - the earth and its resources; air - atmosphere, space; and energy, were to be the common property of humankind, to be managed, for the benefit of all, by the world government institutions. It may have been totally Utopian at the time: an academic exercise. Yet, 20 years later, at least the seabed and its resources, as well as the moon and outer space, have been declared to be the common heritage of humankind, to be managed, for the good of all, by an international authority to be established for that purpose.

There was yet another interesting aspect to that World Constitution: nation-states would be with us for some time, the authors argued, but they were not the proper basis for decision-making with regard to global concerns. The executive council of the world government was to be based on regional, not on national representation, even though the regions - nine were identified - did not really exist as political entities. But within a general assembly of states, one could establish "regional colleges" each of which would have to nominate a certain number of candidates from that region on the basis of personal merit and excellence. The assembly, then, would elect an equal number of council members for each of the nine regions, which would result in a manageable and balanced decision-making body.

The United Nations system, and in particular the Law of the Sea negotiations, have gone a long way in this direction.

Then came McCarthyism and the Korean War, and what had been Utopian, a noble dream, began to look rather absurd. The older members of the Committee to Frame a World Constitution aged and died - including the founder, G.A. Borgese.

Pacem in Maribus

Twenty years later President Hutchins, who had left the University of Chicago and founded the Center for the Study of Democratic Institutions in Santa Barbara, California, called me back, made me a fellow of the Center, and asked me to take up where we had left off 20 years ago. What did the World Constitution mean today? Were we any closer to its realization?

I organised a series of seminars on this question, focussing on human rights, the economic aspects, and disarmament, bringing some very distinguished and interesting new thinkers into the process: Alva and Gunnar Myrdal, Wolfgang Friedmann, Jovan Djordjevic, and Silviu Brucan. The upshot, of course, was that we needed a new international order more than ever, but, alas, we were not a whit closer to it than we had been 20 years earlier.

Just then a letter arrived from an unknown gentleman in Connecticut, a reader of the Center's literature. World government, he suggested, was not in the cards, but it was in the Law of the Sea that things were on the move, and we needed a conference and a new convention on the Law of the Sea: a constitution for the oceans.

That did it. I suggested to Hutchins that here we could connect our lofty ideas and ideals with the realm of politics. The oceans should, in effect, become our laboratory for the making of a new world order. Hutchins was interested. The idea was discussed with Lord Ritchie-Calder, Wolfgang Friedmann, and others, and then, on 1 November 1967, Arvid Pardo made his epoch-making speech at the United Nations and laid it all out for us.

Hutchins and the other fellows at the Center were engaged in a series of conferences, exploring the implications of the papal Encyclical Pacem in Terris. I suggested we should start a project to draft a constitution for the oceans and bring it to public attention in a conference in Malta, the home of Arvid Pardo, and call it Pacem in Maribus. I immediately contacted Arvid Pardo and invited him to the Center, and we elaborated a three-year project, including six preparatory workshops, to culminate, eventually, in a major conference in Malta. The workshops were to deal with the following aspects: the marine environment and the marine sciences, disarmament in the marine sector, and the legal and institutional structure of the ocean regime. The workshops, to which, in the tradition of the Center, the best national and international experts were invited - Ritchie-Calder, Sidney Holt, Alexander King, Jacques Picard, to name only a few - took place in Santa Barbara, at the United Nations Institute for Training and Research (UNITAR) in New York on invitation of Oscar Schachter, another pioneer of the Law of the Sea, and in Rhode Island, where we were guests of Senator Claiborne Pell, who had just published his own model Law of the Sea convention. I remember playing a game of chess with Arvid Pardo in Claiborne Pell's house, which I glamorously lost: a lesson I did not even need to convince me of Arvid Pardo's supreme intelligence and genius. I felt privileged, then and there, to become his student and collaborator.

We produced six well-nourished volumes with our seminars on all aspects of ocean governance. It also became quite clear to us that, as the Convention later was to put it, "the problems of ocean space are closely interrelated and need to be considered as a whole". That was a concept very close to that of the problematique of the Club of Rome, which I was invited to join at that time.

Drawing on the Chicago World Constitution as well as on the discussions and the work of my colleagues, I myself wrote the paper on the institutional framework. It was published in November 1968 under the title The Ocean Regime. Among the fundamental principles that were to govern this ocean regime was one, No. 17, that stated: "The International Regime for the Peaceful Uses of Ocean Space shall provide a pattern for the future framework of international organisation".

Arvid Pardo and Elisabeth Mann Borgese

Pacem in Maribus, June 1970, was by all standards a great success. There were 260 participants from 51 countries, and they included the movers and shakers among ocean scientists and environmentalists, industrialists, diplomats, and international lawyers: Shirley Amerasinghe (later President of UNCLOS III), Paul Engo, Galindo Pohl, Alexander Yankov, Johan Galtung, Salim Salim, Raul Prebisch, Gaetano Aranjo Ruiz, Alan Beesley, Jens Evenson, ReneJean Dupuy, Jean-Pierre Levy of the United Nations, Aurelio Peccei and Roger Revelle, to name only a few, who later became leaders at UNCLOS III. Nobel laureate Alva Myrdal made a splendid statement on the arms race and the need for disarmament in the oceans, and Clare Booth Luce added glamour and publicity. There also was a group of specially invited young people, many of whom were to become leaders in ocean development and the Law of the Sea later on: Ann Hollick of the United States; Wolfgang Graf Vitzthum and UweJenisch of the Federal Republic of Germany; and P.S. Rao of India. The conference President was Justice William O. Douglas of the Supreme Court of the United States, assisted by Harry S. Ashmore, the Center's Vice-president.

When all was said and done, there was a general feeling that this was a beginning, not an end, that the discussions must be continued, and that there was a lot of work to be done, work that would have to be so innovative that it was better done at the nongovernmental than at the intergovernmental level. A continuing committee formed spontaneously but without the organisational support of the Santa Barbara Center, which felt it had done its job as a catalyst.

Establishment of the IOI

So there we were: a group of people of good will, but without an organisation and without a penny. What to do next?

One member of the group, Peter Dohrn, of the Dohrn family which, in the 1870s, founded the famous Aquarium and Zoological Station in Naples, gave me a cheque for $2,000.1 had never seen a cheque for $2,000 and thought, "Now we are really rich and can do a lot". Another member of the group, Silviu Brucan, who was to become a protagonist in the struggle against Ceaucescu's terrible dictatorship in Rumania, had

Elisabeth Mann Borgese and Krishan Saigal. PIM 1996

a brilliant idea: we should initiate a project that was much needed but that would also attract a lot of public attention and might bring us some funding. He suggested - in 1970! - we should start a project on the pollution of the Mediterranean and come up with a plan on what to do about it. We did. We met at the Dohrn Station in Ischia, near Naples; we commissioned Lord Ritchie-Calder to write the study tha was to be launched the following year in Malta at Pacem in Maribus II. The University of Malta gave us its full support. Sidney Holt and Caroline Vanderbilt, formerly of the Department of Fisheries of FAO, gave us most of their time, and thus the work continued. When Ritchie's book was out, we obtained a grant of $ 30,000 from the Ford Foundation to expand the study and conduct an international workshop on environment and development in the Mediterranean region, which took place on 28-30 April 1972 in Split, Yugoslavia. The results of this conference were published in a volume, Pacem in Maribus III: *The Mediterranean Marine Environment and the Development*of the Region, N. Ginsburg, W. Murdock, and S. Holt, editors (Malta,

Royal University of Malta Press, 1974). This effort eventually led to the Barcelona Convention and the Mediterranean Action Plan. The United Nations Environment Programme (UNEP) has always been generous enough to give the IOI credit for this beginning.

We also obtained the support of the United Nations Development Programme (UNDP), and with this support we were able to formally establish the IOI as an international nongovernmental organisation at the University of Malta (1972). Assistance also came from FAO, which seconded its former Director of Fisheries, Sidney Holt. Sidney had just completed several years with UNESCO as Secretary of the Office of Oceanography which later became the IOC. In 1972 he became the first Director of IOI. The Continuing Committee was transformed into a permanent Planning Council, to which a Board of Trustees was added. I was made chairperson of the Planning Council, and Shirley Amerasinghe became President of the Board of Trustees, which he remained until his untimely death in 1981. He was succeeded by Ambassador Layashi Yaker of Algeria. Paul Hoffman, then the Administrator of UNDP, was made honorary president.

The friends and colleagues who joined us in Malta in 1970 and 1971 and formed the Continuing Committee are still with us: an extraordinary group of people from east, west, north, and south. But time has taken its toll: Shirley Amerasinghe, Paul Hoffman, Aurelio Peccei, Ritchie-Calder, King Gordon, Roger Revelle, Rene Dupuy, and most recently Arvid Pardo, have left us, but they have left indelible imprints on our work.

Early Projects

Project now followed project. A Caribbean project was undertaken in the wake of the Mediterranean one. Subjects requiring research were overabundant, but the means to carry out research were very limited. Most of it was done on a voluntary basis, free of charge. We followed up on the subjects already broached in the volumes preceding Pacem in Maribus I; a study on an ocean development tax was carried out by a team of young economists at Cambridge University, headed by Glyn Ford, who today is the leader of the social democratic parties in the European Parliament, where he introduced a strongly worded resolution urging states to ratify the United Nations Convention on the Law of the Sea. Another study, on the economic potential of the oceans, was commissioned from the well-known futurologist and economist, Bertrand de Jouvenel. Disarmament in the oceans remained a continuous commitment, and an in-depth study was carried out under the leadership of General Indar Rykhie, the founder and director of the International Peace Academy. The IOI was the first to examine in detail the linkages between the Law of the Sea and the New International Economic Order (NIEO). This great subject was first broached in the summer of 1975,

in a seminar organised by the IOI for the delegates to UNCLOS III in Geneva. The linkages came as a surprise even to some of the chief architects of the NIEO. The work was to form the substance of the chapter on the oceans in the Reshaping the International Order (RIO) report, written under the guidance of Nobel laureate Jan Tinbergen for the Club of Rome. Arvid Pardo and I were responsible for the ocean chapter, which subsequently was expanded into a full-length study, thanks to a grant from the Netherlands Government.

These and other projects constituted the basis for our Pacem in Maribus conferences, which followed one another, year after year, in Malta, then in Japan, Cameroon, Mexico, Algeria (where the study on the Law of the Sea and the NIEO was presented in 1976), Austria, Sweden, the Soviet Union, Canada, the Netherlands, Portugal, Japan, China, Costa Rica, and Fiji.

Undoubtedly, these projects and conferences were useful. They offered a forum where the problems of ocean space could be considered as a whole. They fed new approaches and new ideas into the international system. However, the heyday of the "think-tank" was over. You could not live off ideas alone. Practical results had to be demonstrated if you wanted to raise enough funds to survive as an institution.

Training

The next breakthrough came with the training programme. Ever since the mid- 1970s it was clear to anyone who followed the Law of the Sea negotiations that the new convention was going to make extraordinarily high demands on the professionals and civil servants of the developing countries. The "job descriptions" for individuals to be elected or appointed to the various organs of the International Seabed Authority were rather daunting. Even in the industrialised world, it would not be easy to find enough qualified persons. The developing countries were seriously disadvantaged. They would need assistance to train a sufficient number of people to fill their quotas. It became equally obvious that they needed new skills to benefit fully from their newly acquired exclusive economic zones (EEZs).

IOI was perhaps the very first to raise the issue of training programmes. The inspiration came from Juan Somavia of Chile (now head of ILO) on a rainy day, during a walk in Rome, between luncheon and a working session of the Society for International Development (SID). We thank him for it. And it was the Swedish

Dr. S.P. Jagota, longstanding Class B Training.

International Development Agency (SIDA) that first grasped the importance of the idea and gave us $ 10,000 to convene a workshop to organise a programme to train people from developing countries for positions in the Seabed Authority. The workshop was convened in Malta in 1977. In the meantime Paul Engo, at the First Committee of the Law of the Sea Conference, took up the idea, and it has been under discussion ever since. There has always been a sort of duplicity on this issue. Within UNCLOS III, there was consensus that people had to be trained; but outside the Conference there was a near consensus on the opposite point of view. That view proposed that the developing countries needed sea-bed mining training like a hole in the head. What they needed was training to satisfy their "basic needs". Thus it was extremely difficult for us to raise any money for the programme. The Canadian International Development Agency (CIDA), which had practically committed itself to supporting the programme, was persuaded at the last moment to back out. Feeling, perhaps, a little uncomfortable about this late reversal, CIDA gave us hope for future support, if we could develop a training programme on EEZ management.

We went ahead, in 1979/80, with a first, interdisciplinary programme on sea-bed mining, Class A, practically without money, just to get it established; and we have followed through with it every year since. Immediately after the completion of the first programme, however, we developed another one, Class B, on EEZ management. This was generously funded by CIDA which from then on was to become our major funder. Without CIDA, the IOI would not be what it is today.

The need for training was obviously enormous. The demonstrable demand for the programmes generated support from the Commonwealth Secretariat, from the OPEC Fund, and from many others in the developed as well as the developing countries. Shortly we were to add a third programme, Class C, on regional development and

cooperation, in close cooperation with the Regional Seas Programme and later with the Indian Ocean Marine Affairs Cooperation Programme (IOMAC).

B Training Programme Participants visiting the Bedford Institute of Oceanography - Halifax, N.S., Canada.

The Class C programmes combined elements of both the Class A and B courses and then adapted them to regions. The curriculum and structure varied according to the area where the courses were held. Topics ranged from those in the international arena (e.g., deep sea-bed mining) to matters of national and regional concern (e.g. coastal zone management), and each was dealt with from the legal, economic, scientific, and technological perspective. The course would begin with an international overview and then move to the particular circumstances of the region.

The host country was always closely involved in the fine-tuning of the course syllabus and the recruitment of local participants. All relevant branches of government of the host country were invited to participate as well as any national, regional, governmental and nongovernmental organization with ocean related interests. A major portion of the lecturers were recruited locally and from the region as a whole. Increasingly, these lecturers included former IOI participants who had attended Class A or B courses. Also the course director (or co-director, in some cases) was chosen from the region. He/she was responsible for the academic content while the IOI Executive Director oversaw all other aspects of course administration and liaison with the host country. A specialized library of reading material was compiled for each course that included both materials from the host country and IOI publications.

The Caribbean course, for example, which was first held in Trinidad and Tobago in 1984, used the IOI Caribbean Study as basic text.

The emphasis always was on learning rather than teaching. Those attending were encouraged to participate in the interactive learning process through exchanges both in the group as a whole and in suitably structured group discussions revolving around identified problems. The perspective throughout was of decision-makers actively involved in finding practical solutions. Weekly assignments were formulated and designed to bring many different disciplines to bear on a problem. This enabled participants to understand, in a practical manner, the way in which interdisciplinary linkages and trade-offs were involved in optimal problem solutions.

The Indian Ocean

In the Indian Ocean, the nations of the region were very much aware of the need for a new policy which would maximize the benefits to be derived from the integration of ocean management into their national and international development strategies. They were aware that the interrelated nature of ocean space called for comprehensive integrated marine policies and complex managerial intervention. It was also clear that no single approach would be suitable for all States.

In Sri Lanka an interesting approach to integrated ocean policy making was developed. The 1982 Law of the Sea Convention gave this island nation responsibility for a maritime territory more than 20 times the size of its land territory. Thus in 1981, utilizing its high level of expertise in coastal and inland fresh water fisheries and excellent coastal conservation, the government established the National Aquatic Resources Agency (NARA) as the "principal national institution to deal with all living and nonliving resources contained in or found beneath the medium of water".

During this period, IOI was involved in numerous discussions with representatives of the Indian Ocean States at UNCLOS III and other for a regarding the need for training in the region. With the encouragement of NARA and others, the outcome of the talks was the first IOI Class C training programme, which took place in India in the latter part of 1982. It was the beginning of a series that focussed on the Indian Ocean.

The 1982 course emerged as a model for training throughout the region. The restructuring of the way governments managed their marine affairs naturally led to the need for training in almost all marine-related disciplines. This was formally recognized at the first IOMAC (Indian Ocean Marine Affairs Cooperation) meeting, held in Colombo in 1985, where IOMAC was officially established as an Inter-Governmental Organisation (IGO) on the initiative of Sri Lanka. During that session, devoted to Economic, Scientific, and Technical Cooperation in the Indian Ocean in the Field of Marine Affairs, the governments of the Indian Ocean (IO) region called for

"the enhancement of skills of those public service personnel who would be charged with the duty to manage the marine areas of national jurisdiction". A cadre of people needed to be trained so they could assume responsibility for developing the policy, and making the decisions, that would reflect an understanding of the nature of the resources of ocean space.

By 1985 120 participants from 18 Indian Ocean nations had attended IOI courses, but this represented only a fraction of the number of trained personnel needed. It was therefore agreed at IOMAC-1 that the IOI would continue to expand its Indian Ocean programme, working in collaboration with NARA, IOMAC, and other regional bodies to meet this need.

Training Programme in India

Subsequent Indian Ocean courses were held in other coastal nations around the region. These included a course in Tanzania in 1987 which focussed on the Western 10 and landlocked countries; another in Malaysia in 1988 which looked at the Eastern 10 and archipelagic States, and a third in Egypt in 1989 with special emphasis on the Red Sea and Gulf States.

At the same time, the IOI and its Executive Director, Caroline Vanderbilt, worked closely with IOMAC to expand and develop the exchange of information and promote cooperative action in marine affairs activities throughout the region. Among other things, this included the publication of" 10 News" a journal dedicated to promoting the exchange of information and ideas concerning development in the field of marine affairs cooperation in the Indian Ocean region. The publication was sponsored by the IOMAC Secretariat and UNDP. It was circulated to all governmental bodies directly or indirectly involved in IOMAC and served to further establish and solidify links between those active in all aspects of marine affairs management. It also assisted in forging co-operative efforts between persons in

different countries who were conducting national and subregional activities with shared interests and facing common problems.

South Pacific

Just as the first Class C course spawned a myriad of related activities throughout the Indian Ocean region, a catalytic process developed in the South Pacific. For the small, developing island states of the southwest Pacific, the situation was especially challenging. With the declaration of their 200 nautical mile EEZ the 14 island states that were participants in the South Pacific Forum Fisheries Agency (FFA) collectively had an area of over 20 million square kilometres under their national jurisdiction.

The IOI had held numerous discussions with the representatives of these islands at UNCLOS III and other international fora. As a result, a one-month course in EEZ Management was held in June 1983 at the University of the South Pacific (USP) in Suva, Fiji. This was developed in cooperation with the FFA and the University's Institute of Marine Resources (IMR). The course was attended by 17 participants from 12 countries in the region. The Course Director was IOI Council member Dr. G.L. Kesteven who had extensive interdisciplinary experience in the South and Western Pacific. He worked closely with senior personnel from IMR and FFA to ensure the quality and relevance of the lectures and field trips.

When this course was completed, those who had been involved felt that there was scope for a wider programme of courses in the area of ocean management. The USP was interested in providing an ocean management segment within its normal academic degree structure. But first it was necessary to consult with the nations of the region to assess their evaluation of the need for and design of such a programme of courses. It was important to ensure that any training offered should meet the needs of the region as a whole. The IOI had demonstrated its expertise in this field of training, and as a result, with funding provided by CIDA and UNDP/FAO, the Forum Fisheries Agency requested Caroline Vanderbiltto undertake this task.

Government personnel throughout the region were already dealing with the issues related to marine activities. Because of their direct involvement, it was thought they would be best suited to advise and comment on any proposed programme of training of future ocean managers. Over a period of several months, all the FFA member countries and regional institutions were asked to contribute to the study by commenting on their perceived need for interdisciplinary training in ocean resources management and on the general content and structure of priorities that countries wished to see included in the programme. In early 1984 Vanderbilt visited most of the countries throughout the region and consulted with government officials in all branches dealing with ocean-related activities. These included departments of foreign

affairs, national planning, manpower planning, education and training, justice, fisheries and mineral resources. In addition consultations were held with officials from all the universities in the island states and most of the regional governmental and nongovernmental organisations.

On this basis, a proposal was developed. Its core was a training plan which aimed at broadening the awareness of governments of their ocean's potential and constraints, as well as enhancing the skills of those public service personnel who were now managing their areas of national jurisdiction. In addition, the programme should also meet the need for training a cadre of people who, in the not too distant future, would be responsible for developing marine policy and dealing with ocean management issues.

The final report ("The Vanderbilt Report") was submitted and approached by the member nations in 1984. The proposal included a 2-tiered programme of training that was designed for two different groups of people and had two different time scales. The first was a one-semester university level course for final-year students from the B.A. and B.Sc. disciplines, which would be offered once a year at a university in the region. This aimed at training those who would be the future managers of ocean space. The second type of course was a short-term intensive training plan designed for those in-service personnel who were at that time actively involved with, and responsible for the integration of marine resource management policy into their national development strategies. This second course was also to be offered annually, but in a different country every year in order to allow wider access and more careful examination of the special situations in the various subregions. The first of these took place in Tonga in 1986. The first time the university course was offered, it was noted to be the second-largest class ever taught at USP. In 1988, a regional Evaluation Committee concluded that the courses had "achieved their objectives" and "exceeded expectation" and recommended continuing the university programme and increasing the in-service courses. The courses continued under the guidance of FFA until 1991 and at that time were fully integrated into USP where they continue today. The present Director of the USP Marine Affairs Programme is Dr. Robin South, who is also the Director of the IOI Operational Centre for the Pacific Islands.

Today the graduates of these two training schemes, now joined by alumni of the IOI training courses, can be found in all marine affairs fora. Some are working with the regional marine-related organisations in the South Pacific, others are high-level government officials in their own countries, and still others are prominent figures in the area of international law of the sea. Thus the circle is closed: The FFA programme of courses was based on the work of the IOI. The establishment of the IOI Operational

Centre at the University of the South Pacific is based on the work developed under the aegis of the FFA.

Another annual special programme was added in 1985, in cooperation with the World Maritime University: a one-week introduction to the LoS Convention.

In 1993 we organised six training programmes, for a total of about 100 participants for a value of about $ 1 million. Having completed almost 40 programmes by that time, the IOI had established itself as a leader in this field.

The programmes reflect the philosophy of the Institute. They are broadly interdisciplinary. They are "foundation courses" that should raise the awareness of the importance of the oceans, both to the world economy and ecology, and in the changing structure of international law and relations. We are as convinced today as we were 30 years ago that ocean affairs are at the vanguard of international development; that here we are forced by the very nature of the medium, the oceans, in which we are working, to do things differently, to truly integrate environment and development concerns, to do things jointly, or we cannot do them at all. Here we are trying to contribute to the formation of a new type of civil servant who understands the implications of the statement that "the problems of ocean space are closely interrelated and need to be considered as a whole" (LoS Convention, Preamble); a civil servant who is at home both in the natural and in the social sciences; who can integrate short-term and long-term, local, national, regional, and global concerns.

Ocean Yearbook

In those same years of expansion, 1979-80, a new level of activities gave rise to yet another development: the publication of the *Ocean Yearbook*. The inspiration came from Francis Auburn of Australia, and we are grateful to him for the idea. The purpose of *Ocean Yearbook* is the same: a publication that should transcend sectoral boundaries and present data, statistics, and developments on all major marine activities, such as fishing, offshore hydrocarbons, ocean mining, shipping, ports and harbours, coastal management and regional development, environment, science, technology, and law and politics. With the generous support of the University of Chicago, the University of Chicago Press, the East-West Center of Hawaii, and, more recently, the Marine Environmental Law Programme of Dalhousie University, and the voluntary work of so many friends and colleagues, starting with Norton Ginsburg, we have made it to volume 14 - and we plan to go on from there.

This period of the 1980s was undoubtedly highly productive, as we established contacts in all parts of the world, obtained consultative status with all the "competent international organisations" of the United Nations system, and developed the four

branches of our activities: research, training, conferences, and publication - all interlinked. One feeds into the other, and our budget increased to about 1.5 million per year. But it was also a period of great risk-taking, of living from hand to mouth, and of not knowing where the money for the next training programme would come from; it was sometimes rather nerve-racking for the decision-makers as well as - or even more so - for the tiny, overworked devoted staff. We would joke about it. "This is training programme No. 36" I would say, "and I am not yet in jail"; and I would ask a staff member to go to the bank (to which we owed a lot of money) and "try to look normal"! There may have been some brinkmanship as we insisted to move forward and never to back down, causing hardship, for which I apologize.

The Global Environment Facility

Omitting, for obvious reasons of space, many details of the development of IOI,1 want to move straight to the next major breakthrough, a grant of US$ 2.6 million from the Global Environment Facility, administered jointly by the World Bank, UNDP, and UNEP. This now enabled us to consolidate our far-flung operations and to develop IOI into a "system" rather than just an "institute". This, we are convinced, is a response to the needs and challenges of our time: a well-coordinated system held together by a common philosophy, a common aspiration, and a common approach to a new world order. With the help of this grant we established four Operational Centres, in addition to those already established in Malta and Halifax - in Costa Rica, Fiji, India, and Senegal, that is, the Caribbean, the South Pacific, the Indian Ocean and the North Atlantic - where our training programmes keep evolving close to where the needs are, where region-specific research is being carried out, where relations with alumni are being intensified and expanded, and where a dialogue with decision-makers in the region can be initiated and continued. These Centres have been established in close cooperation with local institutions. The Directors are almost all local rather than expatriate, assisted by regional advisory councils.

The test for their viability came when the GEF grant expired in 1996/7. Not only have they passed that test - they are all well and active - but six additional Centres have been established on their own initiative and with their own means, in China, Japan, Kenya, Romania, South Africa and Ukraine.

Robert Hutchins, without whom IOI would not have been created, once said that every institution ought to be dissolved after 20 years because within that time it must have fulfilled its mission, after which it becomes ossified and serves no further purpose. We feel that IOI's present reorganisation comes close enough to a rebirth that should guarantee its viability and usefulness for another 20 years. Organisationally, the next step has been the establishment of a generous endowment

fund which secures its independence and continuity for the next phase. As far as the "mission" is concerned, the new phase should be no less challenging and intellectually exciting than the previous phase of the making of the Convention.

The LoS Convention is the most advanced legal instrument for the governance of global concerns ever designed by states. That it could go as far as it did; that, riding on the wave of aspirations and hopes of the 1970s for a NIEO, it could be adopted and signed by 159 states two decades ago, is a major miracle, which could not happen today in the present climate of reaction and disintegration. It is this present climate rather than the inherent deficiencies in the Convention itself (which undoubtedly exist) that is slowing down its effective implementation together with that of the Conventions, Agreements and Programmes adopted by the Earth Summit of 1992, all of which have important ocean components. The Law of the Sea Convention is a process rather than a product, a beginning rather than an end. It needs to be interpreted and analysed in all its economic, environmental and institutional implications. It needs to be adapted, in practical terms, to changing political, economic, geographic and scientific/technological circumstances and emerging new concepts. The tasks ahead are daunting. Circumstances surrounding the International Seabed Authority have changed so profoundly that its functions and structure will have to be adjusted. The deep sea-bed is today very much more important, scientifically, in relation to climate change and biodiversity, as well as economically, new resources being discovered almost continuously. If the sea-bed is more important today than it was three decades ago, when the Convention was drafted, the importance of the Seabed Authority must grow correspondingly.

There are, however, even more complex questions. If, as the Convention states, the problems of ocean space are closely interrelated and need to be considered as a whole, then we need institutions capable of considering them as a whole, institutions beyond the presently existing sectoral and departmentalized framework, whether national, regional, or global. If, as the Convention prescribes, there ought to be regional centres for the enhancement of marine sciences and technology in developing countries, how are these to be organised, and who is to pay for them, at a time when even existing international institutions are starving from lack of funds? If the concept of the Common Heritage of Mankind, as it has been defined (and IOI has made its contribution to this definition), has a developmental (economic) as well as an environmental and a disarmament dimension, should its application be generalized from sea-bed resources to the integration of environment and development as a whole, as postulated by the Brundtland Report and the UNCED process that is based on it? If common and comprehensive security, without which there can be neither economic development nor conservation of the environment, has an economic and environmental as well as a disarmament dimension just like the concept of the

Common Heritage of Mankind, would it be logical to conceive of a new international economic order in which common and comprehensive security rests on an economic system based on the concept of the Common Heritage of Mankind - *pax opus justitiae?*

Here is a research agenda that could keep the system busy for the next 20 years, a research agenda that needs to be articulated and integrated into the training programmes, conferences, and publications.

In a way, we have come around full circle. Our quest for a constitution for the oceans was rooted in our quest for a constitution for the world. The Law of the Sea was where the action was going to be: where dreams could become policies and politics; where grand ideas could be tied down to practical activities like fishing, shipping, mining, and coastal management, and the enhancement of marine science and technology. We have seen the emergence of a legal constitutional structure. We are seeing now the emergence of an institutional framework: national, regional, global, more advanced than any other existing today; more responsive to the need of integrating environment and development concerns than any other; more responsive, also, than any other to the needs and aspirations of developing countries. Are there lessons to be learned from ocean governance for the governance of other global concerns? If so, and how far, are we to apply the concept of the Common Heritage to resources in general - to food, to energy, as well as to intellectual resources such as information and knowledge, which are the basis of contemporary high technology and the post-industrial economy based on it?

How the IOI system intends to contribute to this never ending process of change will be covered in the following sections.

Elisabeth Mann Borgese with Caroline Vanderbilt

/. THE YEARS OF TRANSITION :1993-98

The Global Context

We are always in transition; the transition of the IOI from its status as an institute to that of a system, however was particularly dramatic. And it took place within the context of dramatic changes in the world situation.

The 1980s saw some system breaks in the international sphere. The 1970s had been the decade of developing countries, with various conventions and institutions favouring them being internationally accepted - the concept of the New International Economic Order, the UN Convention on the Law of the Sea, UNCTAD, etc. But the 1980s saw a reaction to this with the industrialised countries getting together in various fora to "roll back" the advantages gained by the developing world in the 1970s - the refusal to transfer technology, moves to abolish UNCTAD and UNIDO, etc. There was also the collapse of the USSR and its disintegration in 1989, the consequent rise of the so-called sole super power and the desire of the latter to create a new world order based on a neo-liberal, capitalist philosophy. In addition to this, an increased awareness developed regarding the finiteness of the Earth's resources, the immense damage being done to the global ecology by the wasteful use of these resources and the poisoning of earth, water and air by noxious and hazardous chemicals and other pollutants.

Networking

Towards the end of the 1980s, the IOI thus was faced with a need to redefine itself and its future role in the service of the international community with a special emphasis on being better able to cater to the needs of the developing countries. Being post-UNCED, the IOI felt the need to extend its outreach both geographically and through languages other than English. The world had become much more complex and new concepts like sustainable development, global governance, integrated coastal zone management, biodiversity, climate change, depletion of the ozone layer, etc., were emerging, and all had very critical linkages with the oceans. Also, although Id's structure had stood the test of time for 20 years, changes were necessary if it was to meet the requirements of the 1990s and beyond.

Hence the transformation of the IOI from an "institute" into a "system". To make the far-flung system of Operational Centres cost-effective, IOI decided not to set up greenfield institutions but to enter into memoranda of understanding with existing institutions. In this way the host institution and IOI could jointly act as delivery systems for training personnel, conducting region-oriented research and holding conferences. MOUs were also signed with the United Nations University (Tokyo),

IOC/UNESCO (Paris), the University of Rhode Island (USA) and the International Centre for Public Enterprises (Ljubljana), as well as with two Indian NGOs, the M.S. Swaminathan Research Foundation and the Muruguppa Chettiar Research Centre, for collaboration in coastal biodiversity and the development of projects for the eradication of poverty in the coastal zone.

The IOI Centres also joined the TRAIN-SEA-COAST network of the United Nations which, in addition to the IOI Centres in Costa Rica, Senegal, India and Fiji, included the Fundacao Universidade de Rio Grande in Brazil, the University of Wales, the Prince of Songkia University in Thailand, ICLARM in the Philippines and the University of Delaware in USA.

Contacts were also established with the United Nations Economic Commission for Africa (UNECA), the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), the East Asian Seas Programme, the South Pacific Regional Environmental Programme (SPREP), the South Pacific Forum, the West African Regional Seas Programme, the Mediterranean Action Plan, the United Nations Programme on Ocean and Coastal Areas (UNEP OCA/PAC) and others with the intention of integrating IOI's research and training with the programmes of these bodies/institutions.

The expansion of the IOI "system" had profound impacts on its governance and management systems. The flow of information and ideas from the ground-level Centres altered Id's perceptions about what was relevant to the felt needs of decision-makers in developing countries. This made it necessary for IOI to make the training programmes more region- and country-dependent. This also led to a reorientation of IOI's research agenda and to the development of an approach that was community- rather than State-led.

The New Governance System

With regard to the governance system, IOI had to turn its attention to the question of devising a system which would serve the twin objectives of having a decentralised networking system while at the same time retaining the objectives and "philosophy" of IOI. Headquarters had the major responsibilities for raising funds and for reporting on their utilisation to the donors. In addition, it was the Governing Board of IOI that, under the statutes, was responsible for determining policy regarding activities, organisation and financial administration. A mixed system was thus necessary, harmonising the need of autonomy with that of unified policy-making.

It was within these parameters that the new governance system of IOI was established. This system had to have the following main characteristics.

The policy statutorily had to be enunciated by the Governing Board. In order for the system to function harmoniously, however, there needed to be interaction between the representatives of the Centres and the Board. This was achieved by having the Directors of the Centres on the Planning Council, which advises the Board. The Vice-Chancellors or Presidents of the host institutions became members of the Governing Board on a rotating basis. The Centres were thereby involved in the planning and decision-making processes of the IOI.

IOI Governing Board and Planning Council Meetings, Fiji,1999

The strategic plan of IOI was required to be drawn up at the meeting of the Directors of the Centres and then submitted to the Board. This plan enabled, inter alia, examination of the interaction of the IOI plan with other areas of cooperative endeavour that the Centres might be engaged in, as for example, the TRAIN-SEA-COAST network. The strategic plan also helped to harmonise the objectives of the cooperating institutions with those of the IOI. Since the cooperating institutions were involved in other networks besides the IOI network, IOI's strategic plan assisted in harmonising all of their activities.

The Centres collected information from their regions and circulated it within the IOI network. Quarterly action reports of all Centres were also circulated within the network. This not only made everyone aware of what was happening throughout the network, but also made for coordinated synergistic functioning while assisting the development of the overall strategic plan. The system of accounts and reporting

within the network was also standardised so as to allow for comparability. This enabled Headquarters to monitor activities and to fulfil its obligations to donors and others.

The New Management System

With regard to the management system, analogous problems arose. With the growing demand for additional IOI Centres in other regions, the problems of management became even more acute. 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 worldwide operations in a cost-effective manner without sacrificing creativity or bureaucratising IOI.

Administratively, both financial considerations and post-modern organisation theory pointed to a decentralised system held together by an information flow network and a light-handed coordinating Headquarters.

The traditional organisational design of a pyramidal structure with the Headquarters "managing and controlling" the "lower echelons" would obviously only lead to large overheads and stifle creativity and also be out of step with post-modern management theories which favour horizontal and flexible structures.

There were, however, some pitfalls to be avoided in such a design. It was crucial to prevent the identity of IOI from being subsumed into that of the host institutions. Another was to see that all the programmes, research, etc., had the distinct multidisciplinary and practical policy-oriented approach of IOI, without quality suffering. Also the accounts and finances 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 these factors in mind, decisions were made to:

- decentralise the management system to autonomous Operational Centres that would be joint ventures between IOI and the respective host institutions;
- provide coordination in the system by having the Centre Directors meet with Headquarters once or twice a year to
    - establish IOI's policy;
    - jointly scrutinise the IOI annual work plan;
    - jointly decide on courses to be developed and research to be undertaken;

- maintain contact through e-mail as a supplement to the annual/biannual meeting of Centres Directors.

Training and Education

The result of the restructuring of IOI has been that the training programmes are now evolving close to where the needs are; region-specific research is being carried out; and a dialogue with decision-makers in the region has been initiated on a continuous basis.

Training programmes have been updated in the context of new developments, and new programmes have been developed, especially for ecosystem management, environmental economics, small islands, planners, project managers, decision-makers, alumni and trainers. IOI training courses have continued to stress the importance of participants developing systems-thinking capabilities, conflict-resolution abilities and a holistic perspective on issues related to development, the environment and the role of technology within the context of the oceans. The courses have also been brought in line with the latest development in instruction technologies, and made replicable and transferable. Furthermore, courses in French and Spanish are being conducted by the Senegal and Costa Rica Centres respectively, thus making delivery of courses multilingual.

The system has been in operation for a little over five years, a time too short to allow accurate evaluation. But some things have already become evident.

- In the decentralised system the Centres have tended to be more creative and committed;
- Different cultures and styles of functioning are being integrated into IOI's research and training;
- The "experts" base has been widening as more and more people are being utilised both for lecturing in IOI courses and in preparing course material;
- Utilising the strengths of different institutions has created synergy.

The main lessons learnt by the IOI network during the 1990s are:

- International NGOs need to act through host governments, local institutions, and in cooperation with regional systems (for example, the Regional Seas Programme) in a decentralised manner;
- Sensitising of decision-makers to the inter-linkages of with climate, the productivity and biodiversity of fragile oceanic ecosystems, the importance of the oceans for sequestering carbon dioxide, and their availability as a resource for food, energy, minerals and fibre leads to rising demands for training

programmes for capacity building in institutional change, science and technology, environmental economics, etc.;

- International and regional training programmes are important for linking global issues with national policies and programmes. These programmes also
    - create a framework for national training programmes;
    - assist in the formulation of national policies, programmes and projects;
    - help regional cooperative endeavours through the development of region-wide networks of professionals and decision-makers.
- Ground-level coordination between regional and national agencies, NGOs and institutions is poor; however, coordination can be improved by networking and through training programmes which stress the enormous value added through integrating sectors, disciplines, departments and national programmes;
- A decentralised networking system is the best way of having regional coordination and cooperation, as it overcomes inhibiting national considerations;
- In the high-tech (including environmentally sound) technologies, South-South cooperation is needed to supplement North-South cooperation;
- "Technology transfer" has to be increasingly replaced by human resources development and institutional restructuring due to the changing nature of "technology", which is knowledge- and information-based in addition to being software-oriented;
- Even if a good restructuring plan is drawn up, a lot of effort is required if the networking system is to remain effective. This requires, *inter alia,* a change from
    - "authority-based" attitudes to dialogue- and cooperation-based attitudes;
    - a structure-based system to an information-based processing system;
    - inductive to systematic analysis.

North-South Dialogue and Sustainable Development

Decentralisation not only generated governance and management challenges, it also enhanced the dialogue, within the IOI, between differing political, economic and ecological perceptions between North and South.

All said and done, the concept of "sustainable development" would be meaningless if it did not mean a radical transformation of thought, policies and institutions, while allowing people and organisations at the grassroots level to regain control of the remaining ecological resources to meet basic domestic needs. Thus defined, the notion of people-centred, civil society-based sustainable development poses a serious

challenge to growth-centred mainstream development thought and policy. It also poses a serious challenge to the political status quo, exerts political pressure on the ruling elite to reallocate international and national resources to combat social deprivation, and means that the dominant groups, in both national and international spheres, have to make sacrifices for the sake of the downtrodden and the underprivileged. The task of sustainable development thus becomes one of achieving locally, nationally and globally, a development that creates a balance between economy and ecology, present and future, rich and poor.

Putting this task into practice was only partly a legal problem. While principles of sustainable development constituted the framework and reference for ocean policy, interdisciplinary collaboration was needed before plans of action and more concrete decisions were made. Sustainable ocean development also required systemic commitment and a focus on new eco-friendly technologies; consistent and pervasive leadership on environment and development, locally, nationally and internationally, from private and public sectors; the extensive public acceptance and participation in the creation of sustainable consumption patterns and lifestyles; and the development of a global ethic that valued sustainability as an ideal.

These transformations had to be further supplemented by new institutional and regulatory frameworks which were more effective, far less expensive, and based on the environment-economy linkage, rather than on conventional command-and-control systems. Such an approach demanded a more ethical utilisation of the global trading system, electronic communication networks and international investment channels as agents for stimulating and facilitating sustainable development.

While various strategies implemented in the last two decades of ocean management - environmental impact assessments, integrated planning and pollution-control techniques, etc. - retained their importance, there was a need to go beyond them and enter into a proactive and productive partnership with non-governmental organizations, coastal communities, and other ocean-based institutions.

First Plenary Meeting of the IWCO - 1996

implementation of each. The IWCO was also requested to analyse the requirements of integrated coastal management and the impact of the World Conference on Population, the World Conference on Habitat, the Agreement on Straddling Fish Stocks and Highly Migratory Stocks, and the World Conference on Small Island Developing States.

The agenda of the IWCO was comprehensive, and probably due to that did it not do full justice to bridging the North-South perceptual gap as regards sustainable development. The regional hearings conducted by the IOI Centres in Canada, India, China, Japan, Fiji, Senegal and South Africa threw up a wealth of information, which was in many ways startling. In the Indian Ocean region, for example, it was the general feeling of respondents to a questionnaire that comprehensive security for humankind as a whole cannot be based on military force alone, but must encompass wider concerns for human dignity and equality, economic well-being and a healthy environment. Realisation of human-ecological security also required bottom-up approaches to ocean governance, greater involvement of NGOs, anticipation and resolution of probable conflicts over critical resources such as water, eradicating poverty and deprivation, and due acknowledgment of peoples and perceptions at the grass-roots level. No less pertinent was the fact that regional issues and perspectives can and do differ radically, sometimes from the perceptions arising from the centres of power and privilege. Similarly, regional issues often vary from global issues, which are often accepted uncritically. In the Indian Ocean region, for example, global warming and sea-level rise are way down on the list of more immediate concerns. Nor is the straddling stocks management a priority. Growing population pressure on the coastal zone, coming largely from urbanisation and the development of mega-cities, the negative fall-out of cultural and economic globalization on cultures, life styles and environment, disposal of municipal and industrial waste in the coastal zone and destruction of mangroves, over- fishing and destruction of marine resources and ecosystems were among the problem areas in the Indian Ocean region that deserved immediate attention and action. Widespread lack, throughout the region, of inter-disciplinary research, inadequate links with industry, lack of exchange of information and scientific knowledge within the countries, and lack of training

inhibited synergy and, to a large extent, reflected the "attitudinal" problem on the part of both the academics and the policy makers.

Similarly in Senegal it was not climate change or sea-level rise that bothered people at the grassroots but growing poverty and the impact, on coastal fisherfolk, of the huge factory ships of Europe which were taking away a large percentage of the fish stocks off the coast of West Africa. In Oceania it was the decline of traditional marine tenure systems that had sustainably managed fish stocks for generations that was causing concern, of course along with possible sea-level rise. In South Africa it was the integration of the black coastal communities into the economy - and so on.

Though not fully reflected in the IWCO report, the result of the regional hearings had a profound impact on the IOI, and inspired it to start the eco-village project.

The Eco-Village Model for Coastal Communities

By 1996 the IOI had begun thinking about taking up projects to empower poorer coastal communities, especially in developing countries. Sustainable development and decentralisation had induced a shift in the interpretation of the principle of the Common Heritage of Mankind. Sharing of benefits with poor countries now translated into sharing benefits with poor people, wherever they were. This added a new dimension to IOI research and training. Our proposal to work with a group of poor coastal villages in Tamil Nadu in southern India, to assist them through the

Elisabeth Mann Borgese tours a coastal Eco-Village in Tamil Nadu, India-1998.

introduction of environmentally and socially sustainable technologies, blending indigenous skills and knowledge and high technology into what is called "eco-technologies" met with very positive responses from funders.

The seed money for the project came from a private Swiss donor and this was followed by grants from the Gesellschaft fur technische Zusammenarbeit (GTZ) of Germany and the Japan Fund for Global Environment. The two-year GTZ-IOI India Eco-Villages Project, with total funding of DM 156,000, began in 1997. It is being implemented through a local NGO in 40 coastal villages of Tamil Nadu, inhabited by dalits, or communities marginalised for years by the social, political, technological and economic systems. The project focuses on women, since they are under greater pressure as compared to the other groups.

The objectives of the project are:

- creation of awareness among the coastal communities, especially women, of coastal ecology and the importance of preserving the natural environment;
- preservation and restoration of coastal ecology through measures such as afforestation, water conservation, etc.;
- improvement of the livelihood of people in coastal communities, especially women, through self-help and income-generation activities;
- testing of eco-technologies for meeting these objectives.

Project activities include:

- a baseline survey of the villages with the active participation of the community;
- formation of women's self-help groups in all the villages;
- training programmes in coastal ecology, environment, eco-technologies, vocational skills and development issues;
- a campaign to plant trees and increase the green cover in the area;
- promotion of fuel-efficient wood-burning stoves;
- construction of ferro-cement rain-water harvesting tanks;
- provision of micro-credit to women;
- use of the project as a field laboratory for IOI India courses on coastal zone management;
- introduction of vermiculture at the community level using household and homestead waste;
- production of Spirulina (an effective nutritional supplement) as a community-based technology initiative;
- a survey of all the traditional wells, ponds and other sources of water and measures to restore such sources and recharge them during the monsoon.

IOI-South Africa started a Seaweed Mariculture Programme in 1997. The goal is to act as a focus for the development of community-based seaweed mariculture within Southern Africa, particularly through research and the running of workshops and training courses, and to do this within the broader context of sustainable livelihoods as conceived by the United Nations Development Programme (UNDP). The seaweed mariculture course has been developed and was offered twice in 1997. Work has been undertaken with a local community in St Helena Bay to develop a commercial pilot project of a seaweed mariculture operation, with the aim of going into full production within two years. As a component of this work, a presentation was given to attract local and international investors into this community project.

Similar initiatives in working with coastal communities have been taken by IOI-Senegal, IOI-Costa Rica, and IOI-South Pacific. Some of the work was done as part of the information networking system also initiated at that time.

In 1997, IOI received a grant of seven million yen for this project from the Japan Fund for Global Environment. The project was to develop an international network for information dissemination about global initiatives in the environmental field and about available eco-technologies, especially those suited for developing countries and coastal communities in the South Pacific, South Asia, Southern Africa, West Africa and Central America.

The Operational Centres in Costa Rica, India, Fiji, Senegal and South Africa implemented the project. While IOI-South Africa created (and currently maintains] an Internet website, the other four Operational Centres conducted workshops, dialogues and training programmes involving rural groups, NGO representatives, workers, urban youth and others. The majority of participants were women from disadvantaged sections of society.

By the end of the project the IOI network had

- created a website as an instrument for a global network for environmental education and information dissemination;
- conducted a total of 44 programmes (workshops, dialogues and training courses] in four continents involving a total of 1,900 participants accounting for over 13,000 participant days;
- created awareness on environmental, health and social issues among the participants to the extent that most groups have planned follow-up activities; and
- assessed the environmental information needs of NGOs and the disadvantaged sections of society in four countries.

The major findings and recommendations of this series of programmes were:

- NGOs and villagers are fully aware of the deteriorating environment and feel the need for clear policies and information for protecting the ecosystem. However, since international information sources like the Internet cannot be accessed by these groups, information should be disseminated using the printed medium in local languages;
- In any case, the information of international origin that is generally found over the Internet and other sources is not relevant to the ground-level needs of the people. They need information on the best practices and appropriate eco-technologies successfully tried out elsewhere under similar conditions.
- Information on eco-technologies developed in countries like Japan and Germany should be disseminated along with procedures for downscaling the technologies and for transferring them to where they are needed.
- In this process of disseminating relevant information, global NGOs like the IOI network should play a role in collecting information and reprocessing it into a locally usable form.

Future Trends

It is always hazardous to try to predict the future. The shelves of libraries are littered with forecasts that have been proved wrong by hindsight. However it is necessary to attempt to peer into the future to try and define a "vision" of what IOI would be like in the new millennium. This "vision" could be fine-tuned every few years but it would lay down a possible "path" for the IOI system to follow.

Some future trends could be as follows:

- Continuing globalization is likely to enhance the decentralization process which will require a growing emphasis on information dissemination.
- Knowledge dissemination could lead to greater programme diversity in research, training and publications.
- The emphasis on community- and people-led programmes would be further intensified with stress being laid on coastal communities and the problems of coastal mega-cities.
- Training programmes would give increasing importance to cultural factors and values in addition to stress on science, technology and law.
- These cultural values should synthesise the neo-liberal philosophy of the dominant powers with the more humanistic thinking emerging in areas of the Pacific Rim, concepts flowing from Buddhism, Gandhiism, Islam and the indigenous cultures of Africa and the Americas.

Krishan. Saigal

///. *ENTERING THE THIRD MILLENNIUM*

The history of the IOI thus can be divided into phases, the beginning of each new phase being marked by a "break-through" development. While the activities of previous phases are adjusted to changing circumstances, they are not abandoned however, and there is as much continuity as there is change.

Thus, *phase 1,* running through the seventies, was characterized by policy research: think-tank activity; *phase 2,* running through the eighties, by policy research plus training; *phase 3,* roughly, the nineties, by policy research, training, plus networking: the building of the Operational Centres system. Phase 4, the first decade of the new millennium, begins with a new break-through development: the establishment of the IOI Virtual University (IOIVU): consolidating and integrating, expanding and developing the work of the preceding three phases.

The "vision" of the IOI will have to be adjusted according to changing conditions, and a continuous review of the various elements by the governing mechanism will be required.

Some of the possible future trends have been indicated at the end of the previous section. One might now add the following.

Policy Research

Policy research will remain decentralised and will start from the grass-roots level, exploring methodologies for the enhancement of community-based co-management systems. But this decentralised work will be kept together by a few system-wide projects. The basic work with poor coastal villages is decentralised; the exchange of results, however, as well as of personnel, is system-wide.

System-wide Projects

1. Fishing Technologies

During the year 2000, for instance, a group of Costa Rican fisherfolk is being sent to a Japanese village to learn advanced techniques of fisheries management, including the construction and use of set fishing gear (different kinds of fish traps which will greatly increase productivity, save energy, and improve cost-efficiency). The Japanese have also developed highly interesting methods of sea-ranching. As is normally done, fish are hatched in hatcheries and kept in a series of ponds until they have reached a stage where they can better fend for themselves against the adversities of nature; they

are then released into the open sea, with a significantly higher survival rate. The innovation is that, during their period of captivity they are called to feed by a specific tone, broadcast under water. So sophisticated is this training, that cohorts of different years will respond to different tones, and the manager thus is able to recall the yearlings, the two year olds and the three year olds at will. Fishers do not have to venture into the open ocean, at high risk and cost, to get the fish, but the fish will come nearshore where they can conveniently be caught. This technology, too, could be transferred to other regions in the future.

2. Risk Management

This is just an example. The consolidation of the IOI system of Operational Centres is reflected in the trend towards more system-wide projects. The project on risk management as part of integrated coastal area management is a good example. This involves all IOI Centres, under the leadership of IOI-Canada. It is a partnership project with the Swiss Reinsurance Company which shares the costs on an equal basis with IOI. The Bermuda Biological Station for Research is also involved. The response to this project from research institutions, private industry and the IOI Operational Centres is most encouraging.

The project includes community-level training for risk assessment; regulation and legislation; community-based training in disaster preparedness and mitigation; and the introduction of micro-mutual insurance systems, linked to the micro-credit systems already introduced in the Indian village project. The concept of the micro-insurance system was stimulated by a tragic event in one of the villages participating in the IOI coastal village project to reduce vulnerabilities and improve the livelihoods in 40 impoverished coastal villages in southern India, presented in the previous section. One of the women took out a small loan to buy a goat to improve the family nutrition. Most unfortunately, the goat was killed by a bus, hit-and-run. Upbraided, either verbally or physically, by her husband, the woman despaired and committed suicide. Had an insurance been in place, the human tragedy, at least, might not have occurred.

The International Ocean Institute is now going to put in place a mini-mutual insurance system covering the 40 villages. Obviously this pilot project can be transferred to the other IOI Operational Centres.

3. The Global Programme of Action for the Protection of the Marine Environment against Pollution from Land-based Activities (GPA)

Another system-wide project is the IOI contribution to the implementation of the Global Programme of Action for the Protection of the Marine Environment from

Land-based Activities (GPA) through the preparation of the UNEP/GPA News Forum. Following consultations in 1998-1999, a Memorandum of Understanding was signed with the United Nations Environment Programme GPA Coordination Office in The Hague on a pilot project for a UNEP/GPA News Forum. This was achieved on the occasion of the Second NGO Consultation on GPA Implementation, held at the Coordination Office in May 1999. It was decided that IOI-Canada would take the lead in the implementation of the agreement. This has been carried out with the involvement of most of the Operational Centres. It has also generated some interaction with the relevant UNEP Regional Coordinating Units. Representatives of IOI-Canada attended the launching of the News Forum in New York at the United Nations General Assembly's Special Session on Small Island Developing States, September 1999. There, they had discussions with the GPA Coordination Office on the future direction of the News Forum.

IOI-Canada has developed a follow-up version of the News Forum for 2000 as requested by UNEP. The new version has a much more focussed audience, objective, and range of content than the pilot phase version. It is also primarily an interactive Internet-based communication tool for those in governmental and intergovernmental organizations who are directly involved in the implementation of the GPA.

This effort of the IOI has intensified its contacts with national and international institutions involved in GPA issues, and enhanced cooperation with the process of the First Intergovernmental Review of the implementation of the GPA. In April 2000, the IOI participated in the Expert Group Meeting in The Hague to prepare for this review.

IOI is including the concerns related to the implementation of the GPA in its regional leadership seminars, starting with the Leadership Seminar on Mediterranean Basin-wide Co-development and Security, Malta, September 2000. These kind of seminars are both think-tank and policy research oriented activities. They relate to the national as well as the global level from the regional focus. The input is obtained from the national and subregional level through the Operational Centres, and at regional level also from our cooperating partners.

At the national level, each Operational Centre has its own relationships with the government and, in many cases, has been requested to assist in training and capacity-building as well as to advise on policy and the implementation of the conventions, agreements and programmes of the UNCLOS/UNCED process.

4. UNICPOLOS and the UNCLOS/UNCED Process

One important element of the regional leadership seminars is to study the overlaps between the various conventions and programmes of the UNCLOS/UNCED process, and to find new approaches to use them constructively and creatively.

The major conventions, agreements and programmes are studied side by side and thus common themes or overlaps are made evident. IOI took up this challenge in 2000. The documents chosen were the Law of the Sea Convention, Agenda 21, the Biodiversity Convention, the Climate change Convention, the Straddling Stocks Agreement, Code of Conduct for Responsible Fishing, the Global Programme of Action, and the SIDS Plan of Action. A matrix was then constructed with the eight instruments laid out horizontally, and, the overlaps or common themes vertically. The overlaps may involve two or more or all of the eight instruments.

An example of overlap between two of the instruments is the issue of the protection of biodiversity on and under the deep sea-bed, for which both the Biodiversity Convention and the Seabed Authority are responsible. We have listed the respective articles side by side. Clearly, this is an issue that needs to be clarified, and cooperation at the inter-governmental and inter-agency levels should be enhanced.

An example that involves *all* the eight instruments examined is technology cooperation and transfer. It is universally recognised that developing countries need advanced technology if they are to comply with the terms of the instruments in question to reduce pollution, mitigate climate change, conserve biodiversity, and implement Agenda 21 so as to attain sustainable development. But the fact that each one of the instruments contains its own provisions for technology cooperation and transfer - as our matrixes show them side by side – undoubtedly implies wasteful duplication of efforts, especially since the technologies involved are mostly the same - which also is shown in our matrixes. Our study proposes a single, regionally decentralised system, within the UNEP-initiated Regional Seas Programme, that could serve the needs of all the Conventions, Agreements and Programmes involved and would be efficient and cost-effective.

Similar considerations could be made for the development of human resources: how can we enhance integration by providing training that is narrowly specialised in eight separate, though overlapping sectors? That training and education must be interdisciplinary and trans-sectoral, is being asserted throughout. And yet each one of the eight instruments examined limits training only to its own sector. Again, we have listed the respective articles side by side. Clearly, this is an issue where cooperation at the intergovernmental and inter-agency levels should be enhanced.

Two other overlaps or common themes we have identified in this first round are:

- Finding innovative ways to generate new and additional funding for the implementation of each of the conventions, agreements, and programmes;
- Monitoring, surveillance and enforcement of compliance with the terms of each instrument examined. Obviously it would be wasteful to establish eight different systems of monitoring, surveillance and enforcement of regulations which are so closely related. The introduction of multi-functional regional systems of monitoring, surveillance, and enforcement would be far more rational and could also open the way towards integrating sustainable development and regional security.

  These topics, among others, will be on the agenda of the regional leadership seminars, starting in the autumn of 2000 with the Mediterranean seminar held in Malta in September 2000.

Through its global-level partnerships, this comparative study was also submitted to the first session of the United Nations Open-ended Informal Consultative Process (UNICPOLOS) in May-June 2000, the establishment of which IOI's policy research at the global level had made a major contribution. It was in fact the IOI that stressed, over the past several years, the need for a global forum to consider the closely interrelated problems of ocean space as a whole, trans-sectorally. It is now universally recognised that it is only the General Assembly, with its universal membership and broad mandate, that is capable of considering the problems of ocean space as a whole. And this now involves not only the United Nations Convention on the Law of the Sea, subsuming a host of global and regional conventions as existing international law, but the whole series of conventions, agreements and programmes emanating from the UNCED process.

It is also universally recognised that the General Assembly simply does not have the time to do justice to this very comprehensive task. Hence a process had to be devised to assist the General Assembly.

To respond to this need, the IOI suggested that the General Assembly should establish a Committee of the Whole, with the mandate that UNICPOLOS, established by the General Assembly, should

Facilitate the annual review by the general Assembly, in an effective and constructive manner, of developments in ocean affairs by considering the Secretary-General's report on oceans and the law of the sea and by suggesting particular issues to be considered by

it, ***with an emphasis on identifying areas where coordination and cooperation at the intergovernmental and inter-agency levels should be enhanced.*** **(Emphasis added.)**

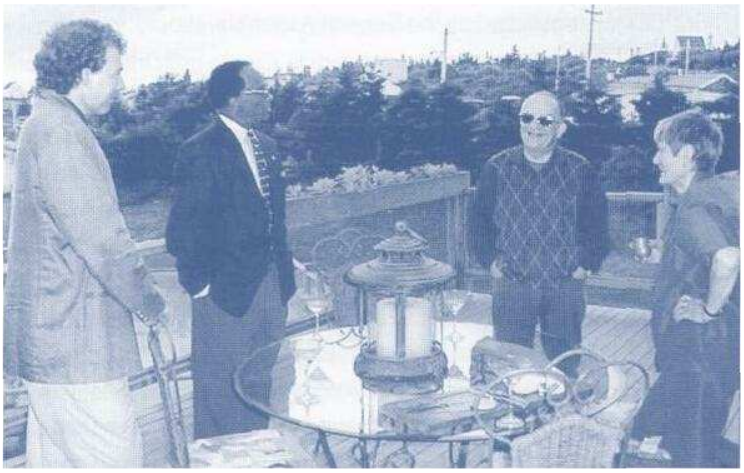
These examples indicate how, in its efforts to adjust to changing and interrelated conditions, the IOI makes use of its network, mechanisms and long term existing cooperative arrangements to link local-national requirements and priorities to global considerations, thus addressing the universal problems of sustainable development.

Training and Education: the IOI Virtual University

The training and educational activities of the IOI are also being adjusted to changing conditions, including globalization, new interdependencies, and technological developments. Adjustments are being made in light of the experience obtained from the IOI training activities since the 1980s.

On this background, the IOI is now establishing a virtual university for ocean governance and marine affairs.

The IOI Virtual University initiative is also a system-wide project, closely involving the Operational Centres and their host institutions. The UNU, WMU, UN Peace University and UNESCO-IOC have agreed to co-sponsor the Virtual University. The response of host institutions so far has been very encouraging.



Elisabeth Mann Borgese, Dr. Awni Behnam, Dr. Noel Brown and Mr. Francois Bailet discussing the IOIVU. 2000.

The suggestion that IOI should put in place, or act itself as, a virtual university in marine affairs was brought up by the Executive Director at the June 1999 meeting of the Executive Committee and Operational Centre Directors. The proposal was modelled on the World Maritime University. However, there would not be any one

central institution, but the organisation would be virtual in practice, using the existing network of the IOI as abase.
The suggestion was endorsed and brought forward by the Honorary Chair to the Governing Board and Planning Council meetings, Fiji, November 1999. The Governing Board decided that the IOI should proceed with this development, and established a Working Group to specify details and report to the next session of the Board, with an interim report to the June 2000 meeting of the Executive Committee in Malta. The activities of the Working Group were initiated directly on the basis of the discussion paper prepared by the Honorary Chair, Professor Mann Borgese for the Board meeting. In that paper she notes:

Undertaking the task of establishing a "Virtual University" or, for the IOI to act as a "Virtual University" is extremely ambitious, challenging and innovative. The "Virtual University" should accept students globally and award an *interdisciplinary, internationally recognised master's degree*. The institutional arrangement is without precedent. The closest, perhaps, is the M.Sc. Degree awarded by the World Maritime University; with whom the IOI has a long-standing working relationship which should include also cooperation on the "Virtual University" project. The World Maritime University, however, is not a "Virtual University". It is a University built of bricks and mortar, where students reside for periods of 1-2 years. The degree awarded, furthermore, is not broadly interdisciplinary but designed for experts in the shipping industry and the management of ports and harbours. Other precedents are given by the UK's Open University or the Commonwealth of Learning in Vancouver, BC. And there is of course a growing network of distant-learning arrangements. None of them, however, is structured to award a globally recognised, interdisciplinary Master's degree in ocean affairs for students anywhere in the world.

The new institutional academic arrangement proposed by the IOI should respond to a number of challenges and new opportunities:

- *The interdisciplinary character of contemporary knowledge, which transcends the departmental divisions of traditional universities.*Traditional universities, in many parts of the world, are struggling to overcome the structural impediments to interdisciplinary learning. The IOI Virtual University could be a pilot experiment toward new approa-
ches to this problem;
- *"Globalization"and the communications revolution,* facilitating global communication among universities and between universities and students, but still largely inaccessible to students in poor countries;
- *Financial constraints on students, especially in developing countries,*which in most cases prevents them from extended sojourns in foreign countries to obtain a well recognised degree; and where they succeed, the *brain drain,* detracting from, rather than adding to the transfer of knowledge to developing countries;

- *Financial restraints on academia,* globally, entailing more and more "downsizing" and "privatisation" of universities, which may endanger academic freedom as well as public higher education as a pillar of genuine democracy;
- The need for a restructuring of higher education is felt globally. As in international law and organisation, or in economic thinking, it is likely that the peculiar nature of the ocean environment and its resources may be most suitable for a pilot project for an innovative approach of the sharing of knowledge as a Common Heritage of Mankind. It would also appear that the IOI structure, reflecting the evolving world order in its local, national, regional and global scope, and its accumulated experience and track record in training in ocean affairs, is uniquely suited for this pilot project in education.

The purposes of the Virtual University are defined as follows:

- The fundamental objective of the University is to contribute to the sharing of knowledge on the oceans and their potential wealth and challenges, as a Common Heritage of Mankind, with special consideration for the needs of developing countries.
- The University shall promote interdisciplinary education, training and research reflecting the complex nature of ocean space and maritime activities, where the multiplicity of related problems have to be considered as a whole in their interface, and furthermore across disciplines.
- Through its unique structure, in combination with the accumulated global experience in education, training and capacity building of the IOI system, the University shall enhance the abilities of developing countries to manage and govern in a sustainable manner their marine and coastal resources for their peoples in harmony with the principles of modern international law and relevant international conventions and agreements.
- The University shall provide the academic framework for encouraging and assisting students from any part of the world, in particular, from developing countries, to obtain post-graduate level education and advanced training, upgrading and supplementing their previous education and work-experience, as well as internationally recognised academic degrees.
- It shall be a continuous objective of the University to advance innovative approaches towards solving some of the major problems besetting higher education at the end of the century and on the eve of the next millennium.

The Working Group has drafted a Charter, compiled a list of existing IOI courses and relevant courses of the host institutions, proposed a number of core as well as optional courses, suggested a system for awarding credits and suggested the level of credit requirements for a master degree; it has initiated preparation of core courses for

on-line presentation, and has suggested an initial governing and administrative structure for the Virtual University. It has also proposed that the name should simply be "IOIVU". The final report of the Working Group is being presented to the Governing Board in Hamburg in December 2000.

Other Programmes

The Youth Programme

Supplementary to the Virtual University initiative, the IOI Governing Board, also in November 1999, endorsed the proposal to launch a dedicated Youth Programme of IOI. This was to some extent stimulated by the experiences of the Eco-Villages project being carried out by IOI-India in working with youth and children in the villages. The cooperation with HELMEPA and its suggestion that we cooperate in increasing youth awareness about the marine and coastal environments on the basis of their experiences in "HELMEPA Junior" also stimulated us. The idea is that the Operational Centres will endeavour to associate youth with some selected activities, or generate a specific youth-oriented action as part of their annual programme. In order to establish some common bases, the Governing Board endorsed a Youth Programme Menu from which the Operational Centres could preferably choose their activities. At the mid-term meeting in June 2000 the Operational Centre Directors reported on youth-oriented activities. It turned out that all the Centres are pursuing such activities. Thus it appears that a system-wide programme is being put in place that will also help rejuvenate the IOI itself through feedback and increasing youth participation.

Women and the Sea

Through a private donation of 1 million Swiss Francs to the Endowment Fund, also known as the Ocean Science and Research Foundation, an IOI "Women and the Sea" programme has been established. The first phase of this programme will run for three years from 2000, and involve about seven of the Operational Centres. The programme is intended to enhance the capacity and participation of women in poor developing countries in ocean and coastal affairs. Programme activities include: training of women decision-makers (IOI-Canada); improving quality of life for women in poverty stricken coastal communities (IOI-Costa Rica; IOI-India; IOI-Southern Africa; IOI-Senegal); development of seaweed mariculture and local fish processing (IOI-Eastern Africa, IOI-Southern Africa, IOI-Senegal); and education for sustainable management, conservation and development of marine resources, in cooperation with the Women and Fisheries Network (IOI-Pacific Islands).

The President of Malta greets the Executive Director, Dr. Gunnar Kullenberg at the Palace In Malta, June 1999. Also in the Photo are (from left to right): Dr. Aldo Drago, IOI Malta Operational Center; Professor Alejandro Gutierrez, Director, IOI-Costa Rica Operational Center; Mr. Maxwell Bruce Q.C., member of the IOI Governing Board; Mr. Haiquing Li, IOI-China Operational Center; Dr. Diafara Toure, Director, IOI- Senegal Operational Center.

Networking

Besides the renewal of MOUs with host institutions for existing Operational Centres, one new Operational Centre was created in 1999 hosted by the Kenya Marine and Fisheries Research Institute in Mombasa with the signing of an MOU in the spring of that year. Two Affiliate Centres were also established in 1999, in Ukraine (Sevastopol) and Russia (Moscow). An MOU on creating an Operational Centre at the Nigerian Institute of Oceanography and Marine Research was signed in the fall of 2000. An IOI-Thailand Operational Centre was also established in the fall of 2000 through an MOU between IOI and four other agencies, namely: the Office of Thai Marine Policy and Restoration Committee; the Aquatic Resources Research Institute, Chulalongkorn University; the Department of Fishery Management, Kasetsart University; and the South- east Asian Programme in Ocean Law, Policy and Management.

An MOU on cooperation with the Secretariat for the Convention on Biological Diversity, of UNEP, has been signed. The preparation of the UNEP/GPA News Forum is also based on an MOU, signed in 1999 and renewed in 2000.

Several local NGOs are associated with IOI projects, for example in the Eco-Villages project in India, the community project in IOI-South Pacific involving the Women in Fisheries Network, and the mariculture/sustainable livelihoods project in South Africa and Namibia.

Pacem in Maribus

The Pacem in Maribus conference serves as a forum for presenting and discussing issues related to ocean governance at the global and regional level. This is well exemplified by the PIM XXVII Conference hosted by IOI-Pacific Islands and the University of the South Pacific in Fiji 1999, where the regional cooperation and revitalisation of the UNEP Regional Seas Programme was discussed, as were the development of the International Seabed Authority, and biological diversity and fisheries problems. The conference served as an integrator, increasing public awareness and participation, and an institution building effort.

Pacem in Maribus 2000 convened in Hamburg, Germany, at the International Tribunal for the Law of the Sea. A new structure of the conference is being tried out: plenaries in the morning and four parallel workshops running throughout the remaining time. The overall theme is "The European Challenge". The four Workshops will cover:

- European Seas;
- Subtropical to Tropical Seas, with particular consideration for the needs of developing countries;
- Legal Conflicts and Problems;
- The emerging institutional framework for Ocean Governance.

Arvid Pardo

At the end of 1999 the IOI had the sad duty to remember and honour the initiator of modern Ocean Governance and one of the leading personalities stimulating the creation and development of the IOI, Dr. Arvid Pardo, who passed away on June 19, 1999. The first IOI Arvid Pardo memorial lecture was given at the PIM XXVII conference, very appropriately by the President of Malta, Honourable Professor Guido de Marco. The Arvid Pardo Award, instituted already during Pardo's lifetime, was publicized, and the Board also decided that IOI would prepare a book honouring his memory. This is being done in cooperation with Malta and the IMO International Maritime Law Institute (IMLI) in Malta.

The second Arvid Pardo Memorial lecture will be delivered by Federico Mayor at Pacem in Maribus 2000. It will address "The Oceans and the Culture of Peace".

Advisory Role

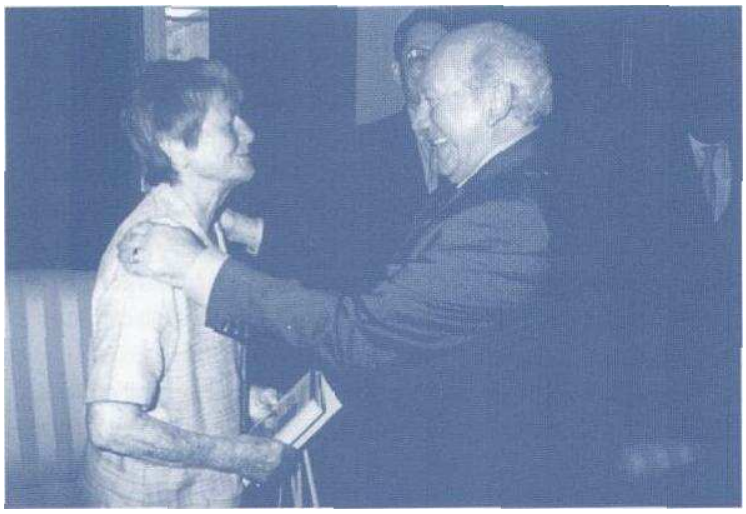
The advisory role of IOI is growing gradually, as indicated by, for example, the advice sought from IOI by the Nippon Foundation in Japan with regard to its further activities on ocean governance; the consultation in 1999 with the Fiji Government; the work in South Africa, Namibia and Angola with respect to mariculture development; the national actions in China through the linkage between IOI-China and the State Oceanic Administration of China; and the recent appointment of Professor Borgese to a small Advisory Council just established by the Minister of Fisheries and Oceans in Canada.

The increasing advisory and partnership role of the IOI can also be seen in the association with the development of the Global Ocean Observing System, GOOS, which is lead by IOC of UNESCO. IOI-Malta provides support to and is a partner in the regional development of GOOS in the Mediterranean Sea through Med-GOOS. IOI-Pacific Islands is a partner in the Pacific development of the Global Coral Reef Monitoring Network which is constituted as an element of GOOS and was endorsed by the International Coral Reef Initiative launched by the USA at the Barbados SIDS Conference in 1994.

Institutional Development

Coherence and Autonomy: a Dynamic Balance

The impact of the IOI depends on its strength as a coherent and comprehensive network, in balance with decentralisation. Coherence needs to be constantly watched and improved. The Operational Centres are autonomous and are very dependent upon the goodwill, support and policy of the host institutions.



The President of Malta, H.E. Guido de Marco, welcomes the Founder and Honorary Chair and his friend Prof. Elisabeth Mann Borgese at the Palace in Malta, June 1999, at the occasion of the meeting of the Executive Committee and Operational Centre Directors.

There is clear evidence of a positive trend as regards the interest and support of the host institutions. There are also positive signs as regards the coherence and the willingness to function as a strong network or system through system-wide projects. However, this aspect must be further pursued through the Governing Board and the Planning Council.

The corporate profile is also being further developed through the increasing coherence and the system-wide projects.

The capability of IOI to respond to changing conditions is indicated by the new focus on coastal work, community level work, distance learning, networking, and IOI system-wide projects. Activities address global, regional, and national-local concerns. Funding is being diversified. Fund-raising activities of some of the Centres have been remarkably successful, and the contributions, mostly "in kind" of the host institutions have been significant. The performance evaluation of IOI is mainly through internal processes. The evaluation of individual Operational Centres is essentially done through their host institution. The Headquarters and the financial management are audited annually.

In the process of supporting the follow-up to UNCED and the implementation of UNCLOS and UNCED-related agreements, the IOI has continued its institutional development. A mission statement and a corporate profile were formally endorsed in 1997-1998. Gradually the sustainability of the Operational Centres is ensured through constitutional adjustments of the relations to the host institutions.

In Canada the Canadian Association for the International Ocean Institute was established in 1998 as a formal organisation with Statutes and a Governing Board. This association has been further strengthened by recent merger of the IOI and the Oceans Institute of Canada, also located at Dalhousie University and comprising a number of prestigious scholars. In India the Foundation for Sustainable Development, India, was set up at I IT Madras, with a Trust, a Board of Trustees and a Trust Deed signed in August 1998. The Trust has two divisions: the IOI Operational Centre and a Centre for Sustainable Development. IOI-India will continue its activities and the Centre for Sustainable Development will focus on environmentally sound technologies and related areas. The setting up of the Trust implies:

- provision of a formal legal status to IOI-India;
- locating IOI-India formally within the IIT system, while maintaining
- flexibility of operation;
- obtaining a complementarity in the Centre for Sustainable Development which devotes itself to close work with the IIT departments and private sectors in the region.

These developments in Canada and India could serve as models for other Operational Centres to follow.

In the South Pacific an evaluation of the sustainability of IOI-South Pacific was conducted by the University in 1998. The result was that IOI-South Pacific will remain as a part of the Marine Studies Programme (MSP) of the University and will maintain its independence. However, the activities of the Centre will become much more closely aligned with those of the MSP. At the same time it was decided to change the name to the more appropriate "IOI-Pacific Islands" from 2000.

Institutional capacity building should be a very important activity of the IOI Operational Centres, which is sometimes overlooked. However, with initiative and daring several Centres are picking up this challenge as part of the overall IOI effort. The Pacem in Maribus conferences are another good example of capacity building. They can serve as significant institution building and regional outreach processes for the Centres. This opportunity was very well utilised by Id-Pacific Islands in the organisation and hosting of PIM XXVII in 1999.

Other IOI system-wide activities, such as the preparation of the UNEP/GPA News Forum, the Risk Management project, the Virtual University initiative, the Women and the Sea programme, and the Youth Programme, should also serve as institutional capacity building opportunities for the participating Centres, as well as opportunities to obtain increased recognition and status within the host institution.

The Newsletter Across the Oceans has been reissued as a system-wide communication and information vehicle. Its regular appearance is also used to keep in touch with IOI alumni. The **IOI Website** likewise serves as a common window that needs to be further developed.

An initiative to enhance the dialogue with the alumni has been launched through Headquarters. The response is quite encouraging and should result in a strengthened association of alumni with regional and local activities of the IOI.

The new initiative of leadership seminars, starting with the International Seabed Authority and extended to regional coverage through the Mediterranean seminar in Malta September 2000, is intended to help focus attention on inter-sectoral perspectives and comprehensiveness at the regional level. It is also one more demonstration of the expanding cooperation of the IOI with intergovernmental and non-governmental organisations and mechanisms. The philosophy of cooperation while maintaining integrity and independence appears as a leading theme throughout the history of the IOI.

Gunnar Kullenberg