

KEIJO'S ADDRESS
AT JAPAN COMMISSION
HEARINGS

Japan's Contribution to Sustainable Ocean Development
by
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Honourable Mayor and citizens of Yokohama City,

This is the second time that I am visiting your beautiful city. I was here less than a year back when our agreement was signed between Yokohama City University and the International Ocean Institute (or IOI) establishing IOI Japan under the dedicated and dynamic directorship of Professor Fuse. I am quite astounded by the amount of work put in by the Yokohama City University and IOI Japan in this short time: the Japanese Commission on the Oceans has been established, the first Plenary of the Independent World Commission on the Oceans organised, and now this hearing as an input into the work of the World Commission. A truly stupendous achievement --but quite in line with the dynamism and energy of the Japanese people.

I may be permitted to say a few words about the IOI and the context in which it took the initiative to establish the World Commission.

The IOI has been active in the oceanic field for the last three decades. The philosophy and the mission of the IOI has been to regard the oceans as a global commons, a common heritage of humankind, similar to outer space, the moon, the atmosphere and the ozone layer --something necessarily shared by all; something that needs to be cared for by all and should foster a spirit of cooperation. It is not necessary to explain this in Japan for everywhere the link between human beings and the oceans is clearly visible: On the one hand, there is the economic value, actual and

potential of ocean development -- we need only remind ourselves that about 75 percent of the 4 trillion worth international trade is sea-borne and therefore ocean-dependent, and so is a large proportion --perhaps 40 percent of the largest industry in the world, that is, tourism, also worth over 2 trillion dollars annually. Think of the important contribution of the oceans living and genetic resources to food security, as well as to the chemical and pharmaceutical industries; think of the mineral and energy resources; of the importance of the oceans to national security, to science, to an understanding of the world we live in; to art, literature and music. On the other hand, we feel --intensely, in Japan --the impact of stress on the oceanic ecosystem in the form of declining fish stocks, changing weather patterns, increasing risk from cyclones and hurricanes, problems of disposal of nuclear waste, acid rain, and so on.

As we are about to enter a new millennium, it is becoming apparent that with all its minor imperfections, the United Nations Convention on the Law of the Sea, which was adopted in 1982 and entered into force last November, embodies principles which are fundamental to the next stage of world history -- the principle of the common heritage of mankind, synthesising as it does development, environment and peace; the principle of the trans-sectoral interdependence of problems entailing a blurring of boundaries, horizontally between departments and vertically between levels of governance: national, regional global; the need for restructuring our institutional structures, national, regional and global, including the United Nations, its major organs, including the Security Council, and its Agencies.

It was in this context that the IOI conceived the idea of an Independent World Commission on the Oceans, because at present, there exists no other forum that could deal with all these problems in their interaction. This Commission takes its place

in a long series of Independent Commissions, from Olof Palme's Commission on Development and Disarmament to Willy Brandt's Commission on North-South relations, to Gro Brundland's Commission on the Environment and Ingvar Carlsson's Commission on Global Governance and including Julius Nyerere's South Commission, Jacques Delors' Commission on Education, and Swaminathan's Commission on Food security. All of these great leaders have succeeded, in the face of ruthless dictatorships and bloody wars and upheavals, to maintain their faith in the dignity of the human individual, in equity and greater freedom. They have stood for the right to economic development, to a healthy environment and comprehensive security for present and future generations. Each of them has contributed something to the evolution of contemporary and future-oriented thinking.

We hope our Commission, the youngest in the series, will continue this great tradition. And yet, there is something that makes this Commission different from its antecedents, different in substance, different, and therefore, perhaps, in methodology.

The difference in substance arises from the very nature of the medium we are dealing with: the World Ocean. There is no way of denying or overlooking it: the Ocean forces us, ineluctably, to think differently, to behave differently, from the ways in which we have been thinking and acting on land for the last few thousand years. The first and last lesson, that to govern Nature we must obey her, is driven home to every oil platform, every fishing boat or container ship, every marine engineering or marine scientific research project, every coastal community, by every 30-meter wave crashing down on it. Working in and with the oceans instills a respect for nature we rarely feel on land. Our perspective on nature and culture, on environment and development, necessarily changes. The changed concept of our relationship with

nature reflects itself on our concept of the relationship -- philosophical, political, economic -- among human beings. As we see nature, we see ourselves: At the same time, it is the vision of our own nature that we keep projecting on nature, on the great ocean.

The oceans cover three-fourths of the earth's surface. They are of crucial importance for the economy/ecology of the 21st century. The new order for the seas and oceans created by the Law of the Sea Convention creates a model for a new global order which is capable of meeting the challenges of the next century. This model has been further expanded by the United Nations Conference on Environment and Development, 1992 (UNCED), also sometimes referred to as the Rio Summit. It now embraces the coastal zone as an important facet of the land-sea interface and as a matter of critical importance to the management of the global ecosystem. The kind of governance that is emerging for coastal zones and oceans may contribute to the economic, environmental, and political security which are the goals of the U.N.'s Secretary General's Agenda for Peace and Agenda for Development. It may make a significant contribution to the implementation of the decisions of the Social Summit.

The World Commission should enhance and advance this process.

But a centralized World Commission cannot possibly cover the diversity of attitudes, opinions and cultures on this planet. So there is a need for decentralised hearings, for finding out how people at the local level, at the level of every-day reality, feel about matters relating to the oceans -- fisherfolk, seamen, port authorities, municipalities such as this one, local governments, businesses, nongovernmental organisations, etc. It is for this reason that I for one consider the hearings held in

Yokohama of great importance to the work of the World Commission and critical to its pursuing a bottom up rather than a top down approach.

What are the main issues before the Commission to which this hearing should contribute?

There is, first of all, the question of improving the quality of life of human beings who are affected by a deteriorating oceanic environment --and this means, the majority of humankind. It has been estimated that 60 percent of humanity (three billion people) live in the coastal zone and within 60 km off the coast. Also two-thirds of the world's cities with populations of 2.5 million or more are on coasts and near estuaries.

Within the next 20-30 years the population of this zone is expected to double and include 75 percent of the world's population.

The proper management and sustainable development of the coastal zone is thus an issue of critical importance being addressed by the World Commission and I am sure that this hearing will come up with innovative suggestions and recommendations which could be forwarded to the Commission.

This would require addressing changing land-use patterns in coastal zones. Other impacts come from pollution, flooding, land subsidence and compaction, and the effects of upland water diversion. Natural habitats are being lost through reclamation for urban and industrial development, agriculture and mariculture. Nearshore regions are being degraded by eutrophication and industrial waste; public health is threatened by sewage contamination of beaches and seafood; and the marine environment is being fouled by the progressive build-up of chlorinated hydrocarbons, plastic litter and the accumulation of tar on coastlines. Some of the waste products of coastal

development, augmented by discharges through coastal outfalls and rivers, spread outwards to the world oceans, carried by the atmosphere, currents, and ships.

The sea is the ultimate sink for most of the liquid wastes and a considerable fraction of the solid wastes resulting from human activities on land. According to UNEP, more than three-quarters of all marine pollution comes from land-based sources, via drainage and discharges into rivers, through outfalls flowing directly to estuaries, bays and open coasts, and from the atmosphere. The rest comes from shipping, dumping and offshore mining and oil production. The greater part of this pollution passes into coastal waters, and more than 90 percent of all chemicals, refuse, and other materials entering these waters remains there in sediments, wetlands, fringing reefs and other coastal ecosystems.

Such excessive nutrient loads bring marked ecological changes. The structure of plankton communities is altered, and unusual plankton "blooms" may appear, uncontrolled by the normal processes of grazing. The subsequent decomposition of the mass of organic matter deoxygenates the water, killing fish and invertebrates, while some species of algae produce foam and scum which interfere with fishing and reduce the amenity of beaches when washed ashore. In some cases the sea is discoloured, giving rise to the term "red tide." Some of the plankton species are toxic and consumers of seafood exposed to such blooms are at risk from paralytic, diarrhoeic and amnesic shellfish poisoning.

Steps necessary to reduce pollution in the seas including changing life styles, recycling of waste, eradication of poverty, and the widespread use of environmentally safe technologies need to be taken and recommendations made in this regard.

We would like to hear from you what is your personal experience with all these problems! Are you aware of any marked deterioration over the past five years or so? Are you aware of any remedial steps that have been taken? Have these steps been effective? Which of the problems you are facing are self-contained in areas under Japanese jurisdiction, and therefore amenable to local or national solution, and which problems transcend the limits of national jurisdiction and therefore cannot be solved unilaterally? How do you propose to solve them?

As we all know, fish stocks are declining around the world. The problem is serious for human beings who depend on fish as their main form of protein, and that includes the poor of developing countries and even rich countries like Japan. The problem needs urgent solutions if sustainable development is to be achieved. The cultural aspects of declining fisheries resources for fisherfolk is a matter of great concern in both the developing and the developed countries.

Japan is one of the most advanced countries in the world in the development of aquaculture and mariculture and, in recent years, in the application of genetic engineering to aquaculture. In how far can the development of aquaculture compensate for the decline of fishing in the wild? How can one integrate aquaculture and fishing, e.g., through sea-ranching? I know of pioneering experiments here in Japan, for instance, training fish to respond to acoustic signals and come inshore to be fished! To what extent will it be possible to retrain fishermen as aquaculturists? How are we to deal with the polluting aspects of aquaculture and mariculture?

Then there is the issue of climate change. The processes of interaction between the oceans and the atmosphere are at present not very well understood, but there is no doubt that the oceans are a critical element determining the climate and climate

change. Considering the uncertainties involved, what are the priorities we can set in implementing the provisions of the Climate Convention and the pertinent recommendations of Agenda 21? Can you recommend suitable "no-regrets" policies, that is, policies which, at one and the same time, reduce the emission of "green-house gases" and advance development and productivity -- such as increased energy efficiency, in which Japan is world master? What can you do to assist developing countries to increase their energy efficiency and, perhaps learn to tap nonpolluting renewable ocean energy sources such as wave energy or ocean thermal energy conversion?

Biodiversity in the oceans is another neglected subject. The productivity and biodiversity of mangrove and coral ecosystems matches that of tropical rainforests, but not even one tenth the attention, and funding, devoted to tropical rain forests is devoted to these oceanic ecosystems. The biodiversity of the genetic resources of the deep seabed is a well-kept secret, shared only by a few leading industrial countries, intent on exploiting them for highly profitable bio-industrial purposes. Is there anything you could do to build on the concept that the deep seabed and its resources are a common heritage of humankind and that benefits derived therefrom should be shared with the poor countries?

There is need for intensification of work on the compilation of oceanic biodiversity inventories, on the development of simple biomonitoring methods and an early warning system. The conservation strategy should be people-centred so that the genuine livelihood needs of the people in coastal areas, including fisherfolk, are addressed. This would give them an economic interest in conservation.

The main objective of the World Commission is to carry forward the process started by the Law of the Sea Convention and the Rio Summit. We all are aware that, while the Conventions are international law, Agenda 21, adopted in Rio is only a set of non-binding recommendations.

Besides, to have adopted a law is one thing, to implement it is another. Many developing countries do not have the finances, the skilled manpower and the technology to tackle the issues arising from sustainable development. And this problem is more acute in the marine sector where most of the technology is high technology, the skills are those required in a post-modern industrial structure and the needed finances are many times larger than required for similar activities on land.

It is here that Japan and the Japanese people have a role to play. Japan is an acknowledged leader in marine technology. It has also developed highly efficient and nonpolluting technologies which lay less stress on the ecosystem. Japan has developed management systems which are considered the most suited for the 21st century.

Transfer of technology, skills and managerial capacity would not only immensely benefit the developing countries but be in line with the generous and self-sacrificing spirit of the Japanese people. In addition to whatever may be done at a government-to-government level I would like to suggest a people-to-people programme. Maybe a Foundation like the Eisenhower Foundation in the United State could be established to fund visits of experts to developing countries to help improve technology, human resources and managerial capacity. Such a Foundation could also facilitate people-to-people contacts in the Sea of Japan region, with municipalities and local bodies playing a catalytic role.

Regional Centres for Marine Science and Technology, as mandated by the Law of the Sea Convention, would be one way in which environmentally and socially sustainable technologies could be made available to developing countries. The pooling of human skills on a regional basis would help in creating a critical mass. Japanese initiatives in this direction would be most important.

The City of Yokohama itself, I feel, can play an important role. It is a Port City. Ports have a role to play in the sphere of pollution control and reduction by detaining substandard vessels or vessels which may have committed a violation of environmental regulation anywhere even in the high seas. Ports now have a similar role to play regarding fishery regulations in the high seas. Yokohama could play a leading role in promoting regional cooperation among Port administrations and transferring Port administration techniques to developing countries, as for instance, the Port of Rotterdam is doing in Europe.

I have raised quite a number of points. There are many more that should be raised in dealing with the vast oceans. But I think I have said enough to initiate a dialogue.

I wish you all success in your deliberations.