Soedjatmoko
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Conference) ENVIRONMENTAL POLICIES IN AN INTERDEPENDENT WORLD

We all have become increasingly aware of the impact, espacially in Asia, the most densily populated among all the continents, of population growth on development and on the environment. The recent globalisation of national economies, as a result of the rapid advances and application of informatics has led to the internationsalisation of financial markets and trade, massive and rapid capital movements, no longer related to trade, but driven my global institutional investors and speculators, and the consequent development of new and global powerstructures that are only accountable to themselves and are beyond the effective reach of any single government. They are part of a transnational sphere with a commanding access to capital, skills, technology and markets. The French economist Albert Bressand has stated it graphically, though not without a bit of exaggeration: "The US now has two central banks: the Federal Reserve and the Japanese insurance companies."

The heightened worldwide competition resulting from these changes has created powerful forces towards diversification among developing countries and greater economic nationalism, but also towards the formation of regional economic groupings. The Canadian-US single market is merely the first step in this direction. The European market that will come into being in 1992 will create the largest single market in the world. Other regional groupings may follow. These developments as well as the instability of the international system now make it impossible to look at the development process merely as a national endeavor. Recent experience has shown, and is still showing, that the vagaries of the international economic system can in one stroke, through recession, or more slowly through an unbearable debt burden, wipe out all the progress a developing country has made.

More generally, given the various intersecting economic, ecological and strategic global interdependencies, it is no longer possible for any country, large or small, powerful or weak, to achieve its economic, social or security objectives by herself, alone and in isolation, without the cooperation of other countries

The search for a single perspective that could encompass the interaction of these three types of interdependencies has therefore become extremely important to our understanding. It becomes even more important in terms of capability to manage these interdependent systems for the common good of the largest number of people.

In the first place, given the global environmental interdependencies, air and seapollution as well as the disposal of nuclear and other toxic wastes have become international problems needing international cooperation for their solution. The warming of the earth's climate, largely as the result of

carbondioxide and other emissions from the industrial burning of fossilfuels or as a result of the destruction of tropical rainforests either for the sake of "development" or driven by poverty, holds disastrous consequences, for all countries in the world.

These have to do with the global changes in the earth's physical, chemical, and weather systems and the earth's biological diversity, resulting from human action. There is now a consensus among the majority of scientists in the world that the warming of the earth's temperature primarily although not exclusively is now inevitable. Its impact is already discernible in today's changing and often unpredictable weatherpatterns.

. The question that has to be addressed is not how to prevent it-for that option is no longer open, but how to slow down and to reduce the warmingprocess to no more than 3 degrees so as to give humankind and plants and animals more time to make the necessary adaptations that may still be within their innate capabilities. Without effective international and national actions we will have to take into account the likelihood of an increase in temperature of 6 degrees Celsius in the next 110 years. In that case it is not impossible that by the middle of the 21st century, i.e. during the lifetime of our grandchildren- the grainbaskets of the American Midwest and the Soviet Ukraine will have turned into scrubdeserts. Grain will then a.o. have to grow in the much less fertile soils in Canada, while other parts of the world will be plagued by too much rain. Towards the end of the century, it is expected that a number of major coastal cities will be permanently inundated because of rising sealevels resulting from the melting of polar ice.

We will have to take into account that already now China, after the USA and the Soviet Union, is the 3d largest producer of CO2. In the long term China's continued industrialisation and the industrialisation of the 3e World is bound to take place, whatever the human and social cost. These processes are bound to increase CO2 emissions by a few factors. Even though industrial countries may embark on major efforts to increase energy efficiency, these efforts may not compensate for the greater fossilfuel utilisation in an industrialising 3d world. In addition we all know of course how poverty is one of the greatest polluters in the world. It drives millions of people to cut their tropical forests to meet their own energy needs.

The point is that the energyproblem, including the technology of its generation and the technology of its use, but also the lifestyles, expectations and values, that lie behind each technological choice, has become a global problem. At the present state of technology there is no hope that at the expected higher levels of energy use the world over, the warming process can be slowed down enough. The hope that nuclear energy could provide an

alternative, has after Chernobyl and other accidents lost much of its attraction, especially now that apparently unexpected problems of finding politically and economically acceptable locations for nuclear waste disposal have emerged. A report prepared for publication in the December 1988 issue of the American journal "Energy Policy" on the implications of the socalled nuclear option in the effort to reduce CO2 emissions, concludes that the transition to nuclear energy will require an investment level that is impossible to achieve either nationally or internationally. Dr. Keepin, one of the authors, stated recently to the press, that only if the nuclear industry were to commission a new nuclear plant every two days, the CO2 level in the atmosphere could be kept more or less constant. This would mean a 20 to 30 times enlargement of total nuclear capacity in the whole world, which would cost \$587 billion a year.

This means that most likely only nuclear fusion and the soft technologies would be able to mobilize enough financial and political support to provide a feasible alternative. This implies that the research and development for these technologies on the scale they deserve to be be undertaken, should not be left to blind marketforces, i.e. the prevailing price of oil. But the costs should be compared with the likely cost of moving major cities from their present locations to higher grounds. These calculations should also take account of the unpredictable food supply problems which will result from the general changes in weatherpatterns and increase in temperature.

It is obvious that the problems of energyneeds of the industrial countries and those of the developing countries are not separate problems. There are of course, quite a number of other environmental problems which require a broad international effort. The hole in the ozone layer is one of them, acid rain and the storage and disposal of toxic waste another. But certainly there is a need for an international energy regime that could regulate the transition of industrial countries and an industrialising 3d world towards an ecologically less destructive pattern, and organize the R&D necessary to that end.

Related to this is the problem of international poverty and po; pulation growth. This problem is most often discussed in terms of foreign aid. It has at the moment become quite fashionable to speak of commpassion- or aid-fatigue when discussing the diminished political and financial support for development assistance.

The problem however, is in my view, an entirely different one. Except maybe for the four Little Dragons, South Korea, Taiwan, Hongkong and Singpore, which have managed to overcome this gap, global economic and social dualism is still a painful reality. This gap is now in the process of

widening as a result of the complex of problems that manifests itself in the debt burden of the 3d world, the net resourceflow to the industrial countries, and the stagnation and even regression of the economy, resulting in the destruction of all the the progress achieved in the area of health delivery, education and other social services. It is bound eventually to lead to major political convulsions, and in those cases where redemocratisation has occurred, to its possible reversal. According to the Japanese economist Saburo Okita 1980 saw a net inflow of \$ 39.3 billion to the developing countries, while 1985 witnessed a net outflow of \$31.0 billion: an enormous shift of \$ 70 billion of official and private funds.

Apart from the debt problem the rapid development of laborsaving technologies has further widened the gap, through rapid increase in productivity of the industrial countries of the North. In the increasingly competitive world of today this development confronts the latecomers in industrialisation with the dilemma of how to become, or remain, internationally competitive, and still be able to deal effectively with the massive underemployment problem that is beginning to strain the resilience of the political system in their own countries, whatever their ideological orientation. It should be possible, and necessary, to think of combining hightech and lowtech, laborsaving and labor intensive components in the production process. However not much work has been done in this direction.

The crux of the matter is that if nothing is done, the enormous disparities in standard of living and in birthrates between the industrial and developing countries will become so great that the pressure to migrate to the industrial countries will turn into an irresistable floodtide. That pressure is now greatest on the border between Mexico and the USA and between the northern and southern riparian states around the Mediterranean Sea. It is quite likely that that pressure will grow and will manifest itself in other places on the globe as well. Even in the 3d world itself. a.o. in Africa where because of war, drought, landhunger or landexhaustion, territorial borders are transgressed by huge numbers of people. Similar occurrences take place in South Asia, and even within such large populous countries as Indonesia and China. We can no longer escape the implications of the fact that together we keep on losing arable land every day while populations keep on increasing.

We all will have to chose from 3 alternatives, if we want to prevent such massive and global redistribution of population: 1) to deal with the problem of underdevelopment and international poverty on a scale that does justice to the magnitude of the problem. 2) accept the free movement of people in the way the free movement of capital across the globe has now by and large

been accepted. 3) a combination of the first two options: a much higher level of international development cooperation, a much higher level of immigration from the 3d world, coupled with policies that aim at increasing the absorptive capacity and the necessary tolerance in the receiving country. It means essentially to accept the inevitability of multi-ethnic states om the industrial world.

There is another dimension that irrevocably ties the South and the North together.

Despite the unexpectedly favorable rate of economic growth of the OECD countries, it is clear that when the developing countries continue to stagnate, a combination of overproduction in the North and undeconsumption in the South may well occur. It is therefore in the interest of the industrial countries to reach a settlement of the 3d world debt problem in a manner that will make resumption of economic growth possible., and a much increased resource flow to the 3d world.

It will be important to realize that in the long run, demographically speaking, the markets of the industrial countries are bound to shrink, both relatively and in absolute terms, while an accelerated development will turn the growing population in the 3d world into potentially new markets..

I mention hese two gargantuan problems simply in order to make clear that there will not be a future for the industrial world that is separate from that of the poor countries. Economic, as well as demographic and ecological interdependence will force all of us to find solutions to our own problems in a global context, and within the limits of the earth's carrying capacity. It is in the interest of each and all of us that we articulate our own vision of the future within the context of a simultaneously developed global vision that encompasses human survival, human solidarity, and the habitability of our planet. We will have to do so in a world of very rapid and profound social change, that seems to surpass the adjustment capacity of our social and political institutions, with an international system in which no country, no single group of countries, in fact even no intergovernmental organisation of any kind, is in control., and in which new players, at the transnational as well as at the subnational level have made their presence felt in extremely powerful ways. It is no exaggeration to state that the "governability" of the global system as well of many states is at risk A great deal will depend on whether it will be possible to make the transnational sphere socially accountable. Much of our thought and reaction patterns seem to be hopelessly obsolete. At the same time global economic growth is an essential condition for humankind to be able to make the major adjustments that sustainable development demands, while human solidarity is not only an ethical category but also a condition for common survival.

The problem of development assistance is therefore not a question of charity, but is everybody's problem. It concerns the maintenance of the ecological life support systems for the human species and the governability of the human community.

It is therefore no more a utopian vision but a practical necessity. It is a problem of humankind's general preparation for life in the 21st century. And we all know, or at least suspect how unprepared we are for that future.

It is obvious that the interaction between population, economics, and environment require an international strategy for global sustainable development. To speak of sustainable development in the context of a single nation state, or of a single region only, no longer makes sense. National as well as regional strategies for sustainable development have to fit into global strategy.

Such a global strategy has to ontain the following elements:

- 1. Restoration of an adequate i.e. massive resource flow to the Thirld World.
- 2. Stabilization of the world economy at a level and in a way that takes full account of the interests of the developing countries.
- 3. Unrestricted increase of international trade.
- 4. A resolution of the Thirld World debt problem that would make possible the resumption of economic growth.
- 5. An international consensus needs to be developed with regard to an international energy regime, which should include the R&D for energy generation and energy efficiency. Such a consensus should also encompass understandings regarding the effective dissemination of these technologies and policies across the globe, as well as arrangements with regards to the protection of the tropical rainforests and to an international system of compensation, and incentives and disincentives for those countries in which these forests are located.
- 6. There is going to be a need to enhance the scientific and technological capabilities in the 3rd world. Without a massive and global spread of scientific and technological knowledge and skills, the dependency of the 3rd world and the gap between North and South, are bound to increase, as will be their incapacity to develop their own solutions to their own problems.

An international program for the dissemination of scientific and technological capabilities in the 3rd world should also

include the enhancement of capabilities in the area of environmental management. Better methodologies will have to be developed towards a more effective integration of development planning and natural resource planning, as well as towards a capacity to participate effectively in global environmental regimes that should ensure the sustained habitability of this planet.

It goes without saying that an effort of this magnitude will be impossible as long as defense expenditures, including R&D in the industrial as well as in the developing countries remain at the present level.

We sould also be aware of the degree of scientific uncertainty regarding a number of problems at this confluence of different interdependent systems. This of course facilitates justification for delaying decisions. Still we will have to learn to make decisions in conditions of scientific uncertainty and social instability, most likely by making decisions sequentially, so as not permanently to foreclose any option that might be important later, by committing oneself irrevocably to a single course . of action. Apart from stimulating the kind of research that would reduce as much as possible, and as soon as possible, the areas of scientific uncertainty, an effort should be made to develop what could be called a new economics that would relate economic theory to the micro- and macro environmental system as well as to new concepts of security, if we want a firmer basis for international consensus and international action. A great deal of new integrative thinking is needed now that the great ideologies that have given shape and direction to the course of history in the first part of this century, have exhausted themselves. In more practical terms, more effective tools will also have to be developed that integrate development planning to natural resource planning and environmental manamgement.

As has been said before Asia with its present population of 2.6 billion - and a projected one for 2025 of 4.5 billion, according to the World Resources report of 1988-89, has to come to grips with the pressure of such massive population increase - despite a number of successful family planning programs in the area, on its natural resources of land and water and its needs for food and energy. Already the rapid destruction of tropical forests, land degradation, and desertification as a result of population pressure are expanding. Together with the rising frequency of floods, they all constitute (not so) early warning signals that the limits of the natural carrying capacity under present arrangements of human settlement, organization and production are being breached, and that further population increase together with the industrialization efforts that will be required, will force all of us to have a hard look

at the assumptions undergirding past development plans, and their likely obsolescence as we move into the 21st cetury. Both the rehabilitation of degraded land, of the forests and of the oceans on the one hand, and the technologies to be used for those purposes as well as for rural and urban industrialization, even when the problems addressed are regional or local, require an overall global approach and effort. The development efforts of each and every country must take place within certain ecological limits.

Over and beyond this, there is the need to develop Asia's human resources and the socio-cultural settings in which they are imbedded to manage their stock of natural resources more productively. It will be imperative also in a number of cases to develop effective international management instruments for eco-systems shared by several countries. The problem here is not only one of institutional innovation, but also one of educational reform and of profound value change. In fact, many of our conventional patterns of thought and of management practices have become hopelessly obsolete. We will have to develop new concepts and instruments for the international management of our ecology and the global economy if we are to articulate a feasible national, regioanal and world strategy for sustainable development. In this connection it might be important to pay special attention to some of the recent feelers put out by members of the Soviet delegation at the informal ministerial level consultations held at the UNEP meeting of January 18th - 20th in Nairobi. The suggestions made there were extremely tentative, - they were not even put in writing-, but very thought provoking. It was among other suggestions, that the UN Security Council's mandate be widened so as to authorize it to deal with questions of international ecological security, or if that was considered too radical, for the Security Council to establish a committee within the Security Council, on ecological crises. Another idea was to make the Trusteeship Council of the UN responsible for the management of the Global Commons. Other countries submitted proposals that on international environmental questions majority votes in UN organs should be considered binding. Reference was also made to the need for an environmental inspectorate and compensatory funding for losses incurred for the sake of environmental protection and conservation. Proposals such as these force us to feflect on how to manage the requirements of global environmental management and sustainable development as effectively, but also as democratically as possible. This should be the political and the research agenda for environmental policies in an interdependent world in the coming decade.