



WORLD COMMISSION ON ENVIRONMENT AND DEVELOPMENT

## FIFTH MEETING

Ottawa, 28-30 May, 1986

WCED/86/2 &amp; 3

## MEMORANDUM

TO: All Members of the World Commission on Environment and Development

FROM: Jim MacNeill, Secretary General

DATE: 7 May, 1986

RE: Draft Chapters I and II of the Final Report (Official)

A draft of Chapter I of the Final Report (Official) is attached for consideration by the Commission.

The content of this draft is broadly as indicated in the outline approved by the Commission in Sao Paulo. However, the title has been changed from "Environment-Development: Recent Trends" to "A Common Concern" in order to bring out the focus on people.

Chapter I is an introductory chapter which will set the tone of the report. It is not a summary, but it should bring out the major themes of the Commission's work. Basically, the present draft attempts to do two things:

- (a) build up the case for an integrated view of environment and development; and
- (b) bring out the fact that the issues to be considered are a matter for widespread public concern.

Chapter I proposes to use the material from the Public Hearings and, perhaps, from the written submissions to the Commission. This will highlight the fact that the Commission has arrived at its conclusions after a wide-ranging process of public consultation and enquiry. It will also underscore that the themes and the issues considered by the Commission are matters for common concern. We will undertake the final selection after the full round hearings has been completed and keeping mind the need to include a balanced presentation of representative views.

Chapter I is followed by Chapter II on the Environment - Development Connection. This chapter elaborates the connection in more analytical fashion and tries to link together all the standard environmental issues with developmental trends. The focus of this chapter is on:

- (a) the systemic nature of the environment - development connection; and
- (b) the inadequacies of present structures of decision making in handling the problems of interdependence.

The first two chapters are rooted in the present and lead up to Chapter III on Sustainable Development (Chapter IV in the outline approved in Sao Paulo). This chapter, which is yet to be drafted, will look ahead into the future and identify the nature of the transition that we need to promote. It will deal with the world as it ought to be in the 21st century. A draft of this chapter will be prepared after the Commission takes a view on the reports of the Advisory Panels.

The third chapter will lead logically to Chapter IV on the Need for International Co-operation. This chapter, which will be circulated shortly for discussion in Ottawa, will argue from the nature of transition to the need for major changes in the modalities of international co-operation on environment and development.

Action Required: For Discussion and Direction

CHAPTER 1

A COMMON CONCERN

NOTE: This draft is really a shell. Extensive use will be made of boxed quotations from the public hearings which will be juxtaposed against the text at appropriate places. A very preliminary selection of such quotations is given separately in an Appendix to this draft. In addition the text will also contain graphic presentations of the facts regarding key environment/development problems.

A. INTRODUCTION

1. All of us who live on earth share in its wealth of air and water, soil and rock. What has happened to this stock of wealth is a part of our common history; its present condition is the root of many of our common problems; the manner in which we solve these problems is the determinant of our common future. All of us will share in whatever befalls this one earth that we have.
2. The earth is one but the world of man is not. Politics and property divide us and each little bit of the world struggles for survival and prosperity oblivious of its impact on others. Some of us consume the earth's resources at a rate that would leave little for future generations. Others, many more in number,

consume far too little and live a life of hunger and squalor, disease and early death.

3. We live within the limits of the resources we command and the skill with which we manage them. We also live within the limits of our moral philosophy and our social attitudes, our political structures and our juridical principles. These limits are not immutable and over the generations they have changed under the pressure of circumstances and the force of ideas. But today these slower and long-term historical processes are inadequate.
4. We live in an age of unprecedented change in production and resource use, in technology, in communications, in the level and distribution of population. The scale of our interventions in nature is increasing. Economics and ecology bind us in ever tightening networks. Immense disparities separate us. All of this holds the threat of destructive conflict and ecological stress, locally and globally. Now, more than ever, the inner limits imposed by our minds and our institutions must change and reflect more closely the co-operation and concern that is so necessary to manage the outer limits defined by the environment in which we live. Our lifestyles, our search for profit or national advantage must be based on a better understanding of the links between environment and development.
5. Our prosperity and progress has depended on our technical ingenuity and our capacity for conscious action, individually and collectively. From the earliest times we have fashioned tools, built homes, used fire and lived in social groups. It is this which has enabled us to survive in diverse, often hostile, environments ranging from icy wastes to hot deserts, mountains to river valleys, dense forest to open grassland. Moreover our ingenuity has grown with the

passage of time, as the knowledge gained by one group through observation and conceptualization is stored and transmitted to other groups. The accumulation of knowledge and the evolution of our social, political and economic institutions has enabled us to dominate the biosphere, so that today we have the awesome capacity to destroy it altogether. We are now at a stage at which we must consciously adapt our objectives and institutions to ensure that this immense capacity for destruction is kept in check. Our impact on the environment and the progress, or lack of it, in our material welfare depends ultimately on the processes of economic growth and development and the search for solutions must begin with a better understanding of the connection between these processes and the state of our environment.

B. KEY TRENDS

6. We live in an age of unprecedented economic expansion. Since 1950 world income has grown at a rate of about  $4\frac{1}{2}$  per cent per year and world population at nearly 2 per cent. In absolute terms, every year we add to global production an amount equal to the total product of France and to global population a number equal to the total population of Nigeria. Three-quarters of the increase in production takes place in the developed countries while seven-eighth of the increase in population is in the developing countries.

TABLE 1.1

GROWTH TRENDS 1960 - 1983

(Annual Average Growth rates of real product)

Region		1960-70	1970-75	1975-83
<b>A. Developed Areas</b>				
1.	North America	4.6	3.1	2.5
2.	Western Europe	4.7	3.4	2.0
3.	USSR and E. Europe	6.7	6.2	3.6
4.	Japan	12.4	5.0	4.6
5.	Oceania	5.2	3.9	2.3
<b>B. Developing Areas</b>				
1.	North Africa	10.6	-0.1	3.3
2.	Sub-Saharan Africa	4.0	4.5	2.3
3.	Latin America	5.4	5.3	3.0
4.	West Asia	7.8	9.4	-2.1
5.	South and South East Asia	5.1	5.6	5.7
6.	China	6.1	5.2	6.9

SOURCE: Handbook of International Trade and Development Statistics UNCTAD 1985

NOTE: Data relate to growth rates of gross domestic product or closely related aggregates except for socialist countries, where they refer to net material product.

7. The expansion of the global economy has varied over time and across regions. Since the mid-seventies the growth rate of production has declined in all parts of the world other than in South and South-East Asia. This change perhaps represents a structural break in the developed countries and an indication that the level and content of future growth will be very different from even the recent past. These changes in the growth orientation of the developed countries may partly account for the fall in growth rates in Africa and Latin America which are more dependent on primary product exports than Asia where growth rates have, if anything risen in recent years.
  
8. The growth process has spread to most parts of the world and the developing countries have broken out of decades of stagnation. Yet the development gap between the developed and developing countries persists and in some respect has even widened. The gap in production, is measured most conveniently by the per capita gross domestic product which, in 1982, was \$9600 in the developed market economies and less than a tenth of that, \$900, in the developing market economy countries. But this difference in level, is not the whole story. What is as important is the fact that \_\_\_\_\_ per cent of the GDP in developing countries still arises from primary production in agriculture and mining whereas the corresponding figure is only \_\_\_\_\_ per cent for the developed market economies, a difference that is reflected in the relative position of these two sets of countries in international trade. There is also a vast gap in productivity, in the capacity for technology development and utilisation and in their roles in the world financial system.

9. The difference in income levels is reflected in the quality of life and the standard of living in various parts of the world. In the developed countries the most striking feature is the growth in the consumption of automobiles and house-hold appliances, the improvement in housing standards, better access to education and health services and the expansion in leisure related activities. In the developing countries such changes in lifestyles are, by and large, limited to the urban elites. For the vast mass of the population, consumption levels are largely limited to the satisfaction of basic needs for food, clothing and shelter. For millions below the poverty line even these needs are not adequately met. .... million people are undernourished, .... million are illiterate, .....million do not have access to safe drinking water, ..... million die every year from water-borne diseases.
10. The picture is not uniformly bleak. Some technological advances, particularly in medicine have been more widely shared and many changes for the better have taken place: the elimination of small-pox and the reduction in the incidence of several other infectious diseases, the decline in mortality rates and increase in expectation of life, the growing enrolment in schools and access to health care, a slow rise in food consumption. But the real impact of technology and development on mass living standards is yet to come.

11. The pressure on resources and environmental stresses are linked to patterns of development and are a product of increases in demand which have arisen because of rising incomes and a growing population. Population growth has been and is a source of developmental and environmental stress in many developing countries. But the greater part of the pressure on global resources has come from the developed countries who at present consume perhaps four-fifths or more of the world's non-renewable resources of minerals and fossil fuels. Even when it comes to food, the share of the developed countries in total consumption is high relative to their share in population, particularly in animal products which are much more demanding by way of land requirements than staple foodgrain production. Similar differences can be seen within countries and the pressures arising from the consumption patterns of the rich in developing countries have been a major source of resource and environmental stress in these countries. Generally, at the global level the demands arising from affluence have been a greater source of resource and environmental stress than the size of population.

<p><b>TABLE 1.2</b></p> <p><b><u>DISTRIBUTION OF WORLD CONSUMPTION</u></b></p> <p><b>(averages for 1980-82)</b></p>					
<u>Units for per capita consumption</u>		<u>All Developed Countries</u>		<u>All developing Countries</u>	
		Share in world consumption	Per capita	Share in world	per capita
<u>Food</u>					
Calories	Kcal/per day	34%	3395	66%	2389
Protein	gms/per day	38%	99	62%	58
Fat	gms/per day	53%	127	47%	40
<u>Paper</u>	kg/per year	85%	123	15%	8
<u>Steel</u>	kg/per year	79%	455	21%	43
<u>Other Metals</u>	kg/per year	86%	26	14%	2
<u>Commercial Energy</u>	mtce/per year	80%	5.8	20%	0.5
<u>Memo item</u>					
Share in World Population,		26%	-	74%	-

12. In virtually every part of the world the evidence of environmental stress is accumulating - stresses which arise from lack of development, misdirected development and over-consumption. A summary assessment of a few critical problems from the standard agenda of the environmental debate will demonstrate this:

- Every year 6 million hectares of land are degraded to desert-like conditions;
- The forest area of the earth has been reduced by half in this century; every year sees the destruction of 11 million hectares of tropical forests;
- Half the irrigation schemes in the world are under the influence of salinization, alkalization and waterlogging;
- The volume of carbon emissions with the atmosphere have more than tripled since 1950 and the global average is more than 1 ton per head per year;
- Atmospheric concentrations of carbon dioxide have increased by 25 per cent and a continuation of this trend could lead to an increase in global surface temperatures, a rise in sea levels and inundation of coastal areas.
- Though ambient air quality has improved in the developed countries, air pollution has increased greatly in many Third World cities.

- Acidification has emerged as a major problem and affected several thousand lakes in Europe and North America; it has also affected 5-6 per cent of all European forest lands and much higher proportions in certain countries like Poland, Czechoslovakia, the Federal Republic of Germany;

13. The inventory of environmental problems can be extended and many of them are dealt with in greater depth later in this report. The essential point is that environmental stresses are now widespread and, what is more important, increasing in their scale of incidence and impact. In many areas we are in a state of environmental crisis in that the balance between man and nature has broken down. In others such crisis will come unless we change course now.

C. THE CRITICAL FACTORS AT PRESENT

14. Environmental stress is not a new phenomenon in human history. Many civilizations have come to grief because of an imbalance between their way of life, their methods of production and their physical environment. Today we have the knowledge and the capacity to anticipate these problems. But we also live in an age when the risks of ecological damage are larger and more global in character. There are basically two reasons for this:

- (i) the rising pace of change in production, resource use and technology;
- (ii) the growth of interdependence through international economic relations.

15. For the greater part of human history the pace of change in technology, social organization and material production has been quite slow and major transformations took place over many generations. But the pace has quickened greatly in the present era and particularly so in the past four decades:

- Population growth in earlier times took place at a rate which involved a doubling say over 100-150 years and the pace of adjustment could operate over generations. The rate of population expansion in many parts of the world today is such that this doubling period is down to 25-30 years and the adjustments have to be made within one working life.
- Over the past century the use of fossil fuels has grown thirtyfold and industrial production sixty-fold. The bulk of this increase, about three-quarters in the case of fossil fuels and a little over four-fifths in the case of industrial production, has taken place after 1950. The annual increase in industrial production today is perhaps as large as the total production in pre-war Europe. Thus, every year we have to recreate the decades of adaptation and development that was the basis of the pre-war European economy.
- The urban population in the developing countries of Asia, Africa and Latin America is increasing by more than 40 million per year so that, every year, we have to create an urban infrastructure for the equivalent of two to three Mexico cities.
- With the advent of science-based research the discovery and diffusion of technical innovations has quickened and necessitated major changes in working practices and economic organization within one working life. For example a farmer brought up on traditional methods of cultivation must master the use of genetically engineered seeds, agro-chemicals, farm machinery and the complexities of modern marketing. Advances in electronics and informatics are making old skills obsolete and new ones necessary not just in industry but also in communications, office-work, education, health and other services.

- As the scale of our technological interventions increase associated risks multiply. The growing simplification of agricultural ecosystems with the spread of monoculture and uniform crop varieties can amplify the effects of weather stress, pest attacks and plant disease. The potential for disruption of a pre-war power station of a few hundred megawatts is very much lower than of a nuclear power station of several thousand megawatts whose malfunctioning could affect a vast geographical area. As the number of large dams and reservoirs increases, and most of them have been built after 1950, human intervention in the hydrological cycle is no longer marginal and can lead to unexpected problems. Chemistry, an ancient discipline, has been used to produce a growing number of novel products and at present the number of such products introduced in the market is perhaps four times greater than in 1950 - often, not enough is known about the side-effects and long-term consequences of these products. The newer technologies of bio-technology seek to interfere with the genetic structure of various organisms and plants.

16. The rising pace of change in production and resource use and in the scale and complexity of our technological interventions in natural systems poses two major problems for human societies. The first is the increasing risk of unexpected side-effects and the shortening of the time available to cope with these. The second problem arises from the much slower pace of change in our economic, social and political institutions which are increasingly incapable of handling all the consequences of individual and collective decisions. As time passes the pace of change and the degree of our intervention in nature will increase not decrease. What is needed now is a conscious effort to adapt our economic and political systems to cope with this reality.

17. The rapid rate of change in production has been accompanied by a rising level of international economic interdependence. Since mid-century, the international economy has to a significant extent become a global or world economy. From the early 1950's onwards, revolutionary changes in transportation and communications, liberalized trading arrangements, increased labour mobility, the emergence of transnational corporations, and a relaxation of foreign exchange controls in the industrialized market economies, generated growth in the international movement of goods, services and capital that far outstripped growth in production. In the third of century ending in 1984, the total volume of world trade in goods and services increased more than eightfold and at a rate much faster than world production.
  
18. The nature of the economic interaction between the developed and developing countries has changed in recent years because of the growth in economic power of some oil exporters, the rapid rise in manufactured exports from some developing countries and the growing importance of some of these countries for world money markets. However the number of countries and the size of population affected by these basic changes is still limited and the bulk of the population of developing countries continues to live in poor countries with one or more of the following characteristics: (a) a high degree of dependence on agriculture (b) foreign exchange earnings based primarily on exports of primary commodities (c) a continuing need for international financial and technical assistance and (d) a limited potential for autonomous technical development.

19. Many of the environmental problems confronting the world are rooted in this history of rapid, unequal and unstable development. The expansion of the industrial economies meant a substantial increase in the demand for non-renewable resources and raised certain questions about resource depletion which was one of the earliest of environmental concerns to attract widespread public attention. In recent years the content of growth in the industrial economies has changed with a greater emphasis on informatics, electronics and the service sectors which are not very resource intensive. However for the greater part of the post-war period, motor-cars, electricity, and chemicals were the crucial elements in the rising standards of living in these countries. Similar changes are taking place at present in developing countries particularly in urban areas. As a consequence a whole series of global, regional and national pollution problems have arisen.
20. In many developing countries pressures on land and water resources have resulted in accelerated rates of desertification, soil erosion, salinity, etc. In some this is linked to the pattern of world economic relations which has imposed some critical constraints on the growth process. In order to find the foreign exchange required for sustaining growth many developing countries have had to intensify the production of primary products for export and often this has been at the expense of food crops which have been pushed to marginal lands. The dependence on primary product exports has also made these countries highly vulnerable to balance of payment pressures because of fluctuating and, in some cases, secularly declining terms of trade.

Large numbers of subsistence farmers have been marginalised and rural deprivation has led to migration and urban squalor. In this sense the entire complex of environmental problems in these Third World Countries is linked to their position in the world economy.

21. There are many Third World countries which are not caught in this tangled web. They have managed to raise food production substantially and to diversify their economies by increasing industrial output and exports. However even in these countries long-term environmental and developmental needs have often been sacrificed for short-term gains. Agricultural production has often been increased by cutting down forests and extending chemical and water-intensive mono-cultural agricultural systems at, perhaps, some long-term risk to the environment and hence to development. In industry a rapid expansion in production has often led to extensive pollution and exposure to hazards. Most important, the necessary concentration on directly productive investments and the diversion of resources to sustain imitative living standards has led to a relative neglect of water supply, sanitation, urban amenities and similar services thus worsening the quality of life, particularly in cities.
22. Poverty and environmental pressures lead to catastrophes because of the economic vulnerability of many poor countries. The margin required to cope with natural disasters like droughts or floods is not available and what in a richer country could have been managed with food or foreign exchange reserves becomes, in these poor countries, an unmanageable emergency. Vulnerability also reflects itself in an inability to persist with

sound long-term policies in the face of such natural disasters or short-term economic fluctuations. Thus quick gains in food production or of exportable crops and minerals are sought even at the cost of long-term environmental damage.

23. The growth in economic interdependence amplifies the consequences of national decisions. The domestic policies of one country (or group of countries) on, say agricultural subsidies, generates pressures through international trade and finance on the resource systems of other countries, a possibility that is very real as is shown by the impact of the Common Agricultural Policy of the EEC on Africa and Latin America. Thus the implementation of an ecologically sound set of policies requires a more complex exercise in the reconciliation of interest groups with widely varying degrees of economic power. It enmeshes the environmental issue in a more contentious framework of negotiations on international trade and finance.

D. A COMMON CONCERN

24. A concern for the environment and for development is really a concern for people because it is the common people everywhere who are most deeply affected by environmental stress and developmental failures. The Commission has, in its public hearings, heard this from people in every continent on earth, heard this not merely from experts and activists but also from farmers and fisherman, forest-dwellers and slum-dwellers, industrial workers and managers.

25. Today there is perhaps no person on earth who does not face some problem of environmental or developmental stress in his or her everyday life. The forest-dweller who sees the source of his livelihood cut away before him, the woman who has to walk half-a-day for the wood she needs for her family, the fisherman who has to move further and further out to maintain his catch, the farmer on the edge of the desert who has to fight encroaching sand dunes, the peasant who sees his land deteriorate because of wind and water erosion or salinity, the nomad who has to travel further afield for pasture and water for his animals, the industrial worker who ingests noxious fumes and carcinogens, the slum-dweller who lacks basic amenities, the city-dweller who breathes air polluted by automobile exhausts, the householder exposed to a hazardous waste dump, the nature-lover who sees lakes and forests despoiled by acidification - all of them are, in different ways, victims of environmental and developmental stress and between them they account for the greater part of humanity.
26. The growing public concern for the matters dealt with by the Commission is reflected in the spread of activist groups in every part of the world. As many as \_\_\_\_\_ non-governmental organizations from \_\_\_\_\_ countries testified before the Commission in its public hearings and there are many more like these all over the world. At a rough guess there are perhaps as many as \_\_\_\_\_ thousand NGOs whose primary objective is environmentally related constructive work or communications. The growing strength and prestige of these organizations reflects the rising importance of environmental issues in political and social consciousness and, equally, a belief that these issues are not receiving the attention they deserve in national

and international decisions. In some areas this has progressed to a stage where environmentally-oriented political parties are a considerable force. Today a public commitment to environmental protection and enhancement is a common feature of most, if not all, political platforms.

27. The public concern for environmental issues has, in many cases, led to a public response in the form of changed behaviour. Witness for instance the growing popularity of unleaded gasoline and catalytic converters, the success of glass and paper recycling programmes in some countries and the changes in dietary habits in some affluent societies. There are cases of mass movements for forest protection and resistance to indiscriminate irrigation in some developing countries. In fact most traditional societies have in-built codes of behaviour that recognise the critical importance of environmental protection and the real difficulty often is the powerlessness of these societies and their codes against the narrower commercial objectives of more powerful interest groups. There is in fact a basis for a changed system of values both in the developed and the developing countries and the real challenge is to ensure that these new values, with their emphasis on environmental protection and harmony with nature, are more adequately reflected in the values that govern our political and economic structure.
28. The concern for environmental problems has been articulated in international discussions for some time now. In the early stages the focus was on the problems that arise from rapid growth in the form of pollution and resource depletion. Much of the early concern was with the notion of limits to growth set by resource constraints and seemed to suggest that the solution to environmental problems had to be sought in a reduction

in rates of economic growth. This was manifestly not the case in developing countries where, more often than not, environmental problems arose from the lack of economic growth rather than too much of it. During the early seventies a series of international statements recognised this clearly and shifted the focus of environmental debate from the developed to the developing countries, a process that was reinforced by the widespread concern about the African drought.

29. The Commissions public hearings have demonstrated that increasingly environmental problems are seen to be linked to a broader class of developmental problems. First, many environmental problems are seen to be the result of maldevelopment (e.g. the link between air pollution and misconceived energy policies) or lack of development (e.g. the impact of stagnation in food production on land requirements for a rising population). Secondly, the genesis of some problems is seen to lie in the skewed distribution of economic power between and within nations (e.g. the impact of metropolitan demands on desertification). Thirdly, the solution to many environmental problems is seen as incomplete unless the developmental problem of sustainable livelihood is simultaneously solved (e.g. the futility of forest conservation measures in the absence of steps to safeguard the livelihood of forest dwellers).

30. There is in fact a need to define the goals of economic activity in terms of sustainable development, a concept that seeks to integrate increases in production with resource conservation and enhancement and link both of these to the provision of an adequate livelihood base and equitable access to resources. The growing recognition of the environment-development connection has been accompanied by a heightened sense of international interdependence, both ecological and economic. The roots of many local problems, environmental or developmental, are seen to lie in the policies of other nations. Equally national actions are seen to have regional and global effects. The environment becomes a potential source of conflict very much as economic interests in a narrow sense have often been in the past. Moreover the instruments of conflict have in them the power to trigger an environmental catastrophe. Thus the internationalisation of environmental and developmental issues is linked to questions concerning global and regional security.
31. The Commissions' public hearings also brought out one important implication of the environment-development connection - the solution to many environmental problems lies not in technical fixes but in more basic changes in the orientation of all economic policy. Environmental protection cannot be pursued without taking into account for instance, the impact of agricultural support prices on land use, of international trade patterns on deforestation or desertification, of energy prices on pollution.

32. The Commission's public hearings have clearly demonstrated that the usual approach addressed to environmental problems as conventionally defined is inadequate. If we are to anticipate events, address ourselves to causes and to look for lasting solutions environmental and developmental problems have to be integrated and recast into a new framework that tackles both sets of problem simultaneously. Moreover, because of growing interdependence, the solutions will require actions that cut across sectoral and political boundaries and require a new approach to international co-operation and national decision-making. These are the tasks to which we address ourselves in the rest of this report.

Appendix to Ch. 1

A sample of quotations from the Public Hearings  
for Chapter 1

Speaker from the floor, Public Hearings WCED, Sao Paulo, Brazil

I think there should be a way of going into the forest and getting your food from the forest without touching a single tree. This is what these coastal inhabitants and what the Indians used to do. But these land developers, they burn the forests for five to six days, destroying huge areas of the Sierra do Mar. I live there. I would like to call people to help me put this fire down and try to do something about it. But we are just too weak for this.

Mary Allegratti, Public Hearings, WCED, Brasilia, Brazil

I find the logic of this Amazon development proposal strange. We extract mineral wealth to pay the foreign debt and contract more debts in order to create more wealth.

Celso Orsini, Public Hearings, WCED, Sao Paulo, Brazil

Our values of inhalable respirable particles in Sao Paulo are way above the minimum acceptable standards. What we must keep in mind is that these statistics express a minimum situation. We measure at the top of a building fifteen metres high, which is much higher than where people usually breathe, at the university campus where there is very little pollution, since it is an area distant from plants and pollution sources. From the spatial point of view these results express the situation in an area of minimum. From the temporal point of view, these three years are the three years in which Brazil went through its minimal industrial production and also the least automobile movement because of the prices. So this is a minimum position which already shows that we are above the minimal acceptable level.

Walter Costa, Public Hearings, WCED, Sao Paulo, Brazil

The problem is not the shanty town; it is not a problem, it is a solution. Because they found their own technique, their own resources without any assistance from anyone else and they solve their housing problems. The real problem is not that. It is the poverty, the lack of planning, the lack of technical assistance, the lack of financing to buy construction material, the lack of urban equipment.

Ailton Krenak, Public Hearings, WCED, Sao Paulo, Brazil

Respect our place of living, do not degrade our living condition, respect this life, we have no arms to cause pressure, the only thing we have is the right to cry for our dignity and the need to live in our land.

George Adicondro, Public Hearings, WCED, Jakarta, Indonesia

Really, population control efforts do not end with birth control, but birth control should be in conjunction with fostering small families as an ideal situation, by improving the general quality of life.

Kartono Mohamad, Public Hearings, WCED, Jakarta, Indonesia

"In general, our population policy is quantitative, very quantitative-oriented, and especially in the family-planning sector.

We promise that by changing the norm for big families to small ones, the family will be prosperous and happy...We have to prove that the small family is a happy, prosperous family, that if people have been motivated to accept this norm, to have a small family, then they will be prosperous and happy. This is actually very difficult. It means that we have to encourage the qualitative side of the family planning programmes."

Anwar Fazal, Public Hearings, WCED, Jakarta, Indonesia.

Three dominant, terrible cultures are becoming part of our lives, and we need to break away from these dominant cultures.

The first is the culture of violence. It is easy to understand this culture of violence, if you talk in terms of the one million Hiroshimas, or the one million US dollars a minute that we spend on armaments. It's easy also to conceive of violence when someone is attacking someone else, and cutting them up. But we forget that there is so much violence in our production system, in our consumption systems, that causes us harm, that causes harm to our bodies, to the environment. We have to begin to look at this kind of violence in a new way. This violence relates to medicines banned in some countries that are permitted for use in other countries. It concerns pesticides that are not allowed in some countries that are then used in other countries, or used under conditions in which they should not be permitted. We see it in simple things like the motor car that we take for granted.

The second dominant, terrible culture in our society is that of waste, cultural waste where we so easily use up our resources and are blind to the means by which we use up these resources. This has an impact on policies and an impact on our lifestyles, the ways that we misuse energy, and I will not elaborate on it. We are all very, very familiar with this aspect of our culture.

The third is much more insidious, much more important in our society, and this is the culture of manipulation. The way in which our behaviour can be changed by selective information and by withdrawal of information.

Odd Grann, Public Hearings, WCED, Oslo, Norway

"The classification of disasters, either as "natural" or "man-made" is not a reliable one in our days. In Red Cross Work, we have made the traditional distinction between natural and man-made disasters, the latter one mainly armed conflicts, but this definition is to a large extent misleading. In our opinion there is a man-made element in almost every disaster and most of the reason why disasters in general are increasing today must be attributed to acts of man...."All major disaster problems in the Third World, it is being pointed out, are essentially unsolved development problems. Disaster prevention is thus primarily an aspect of development, and this must be a development which takes place within the sustainable limits."

Rakel Surlien, Public Hearings, WCED, Oslo, Norway

Initially, "acid rain" raised many sceptical eyebrows and was largely dismissed by governments as an issue of concern only to a few troublesome scientists and officials in Scandinavia. Since then the scepticism has been replaced by growing awareness of the potential damage and destruction caused by acid rain. In recent years, as it has become clear that the damage due to acid deposition is crippling forests, corroding materials and historic monuments, contaminating groundwater and affecting human health, most governments have recognized that an environmental problem of major proportions has arrived.

Peter Wilkinson, Public Hearings, WCED, Oslo, Norway

Why must we gamble with the lives of innocent children in order to generate plutonium for bombs? Even to contemplate dumping radioactive waste into waters which belong to all of us as part of our global heritage is an outrage. For us to make such important decisions on behalf of future generations without taking into account the morality of using international waters as an exclusive rubbish bin is an arrogant act.

Irving Mintzer, Public Hearings, WCED, Oslo, Norway

The ultimate potential impacts of a greenhouse warming could be catastrophic. It is our considered judgement that it is already very late to start the process of policy consideration.

Per Lindblom, Public Hearings, WCED, Oslo, Norway

The problems of today do not come with a tag marked energy or economy or CO<sub>2</sub> or demography, nor with a label indicating a country or a region. The problems are multi-disciplinary and transnational or global.

David Rehling, Public Hearings, WCED, Oslo, Norway

I think it is very important that the Commission pays some attention to two aspects of agriculture in industrialised European countries such as Denmark. The first aspect is agricultural errors increasing the tendency to use chemical fertilisers, pesticides herbicides, fungicides, just to mention a few. This vast amount of chemicals in itself has a detrimental effect on the eco-balance of the soil and it is also an increasing source of pollution to the ground water and also the drinking water. The second aspect I want to call your attention to is the agricultural subsidy policies that very often encourage this form of abuse of the soil. I specifically think of the agricultural subsidy policies of the Common Market, the EEC. I recommend strongly to the Commission to suggest a change in this policy so that it ensures sound agricultural practices based on long-term sustainability of the soil and drinking water.