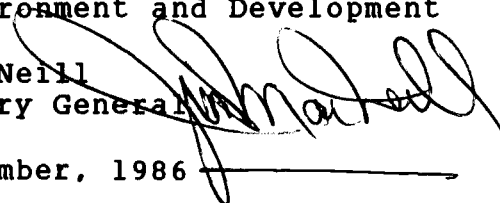


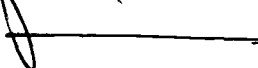
WORLD COMMISSION ON ENVIRONMENT AND DEVELOPMENT

SEVENTH MEETING
Moscow, U.S.S.R.
December 6 - 12, 1986

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

FROM: Jim MacNeill
Secretary General 

DATE: 26 November, 1986 

RE: Draft Chapter 12

I am enclosing a draft of Chapter 12 on legal and institutional change, entitled provisionally "From Common Concerns to Common Action". You will note that it has been developed in three parts. The first two are designed to provide a bridge between the first eleven chapters of the report and the third section setting out the draft recommendations on institutional and legal change.

A serious attempt has been made to reflect the Commission's initial broad discussion of this subject in Harare. The Chapter has also been discussed extensively with Maurice Strong. Due to the pressure of time, however, it was not possible for him to review it before it went out.

The Commission has agreed to finalize its report in Tokyo. It is important, therefore, that discussion of this first draft in Moscow provides sufficient guidance to enable preparation of a next-to-final draft for the special meeting at the end of January.

The draft is much too long. Now that we have put it together, it seems clear that we can both shorten and streamline it by integrating Parts II and III and by editing down Part I. Unfortunately, time does not allow us to do that before sending it to you.

The present draft has not been edited by Linda Starke, and a selection of quotations from the Public Hearings has not been made yet, and is therefore not reflected in the present text.

ACTION REQUIRED: For Discussion and Approval

W0035B/JM/bb

CHAPTER 12

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CHAPTER 12

FROM COMMON CONCERNS TO COMMON ACTION

1. The next few decades are crucial for the future of mankind. Pressures on the environmental resource base of development are now unprecedented and are accelerating at rates and scales never seen before. Profound changes are taking place in the natural systems which support life and economic activity on this planet, increasing the risks to our own survival. At the same time, we are developing enormous opportunities for peace and for more sustainable forms of growth and development. New technologies and virtually unlimited access to information offer great promise. But we remain in the grip of old fashioned ideas, institutions and concepts of sovereignty which act as powerful restraints on sustainable growth and development.

2. The time has come to break away. Commissioners have noted a number of distinct trends which provide directions for actions that must be taken to reduce risks to survival and to put future development on paths that are sustainable. Dismal scenarios of mounting destruction of national and global potential for development – indeed, of the earth's capacity to support life – are not unescapable destiny. In fact, in the Commission's view, one of the most hopeful characteristics of the transitions referred to in earlier Chapters is that invariably they reflect great opportunities for sustainable development, providing that

institutional arrangements permit sustainable policy options to be elaborated, considered and implemented.

3. The demographic transition, for example, can be influenced within a range of plus or minus 2.5 billion people; the transition from the linked poverty-environmental degradation cycle to a rising equity - environmental enhancement cycle can be made; the energy transition can result in significantly lower or higher energy consumption per unit of production; the transition to a fold increase in food production can come from a shrinking or stable land base depending on whether and how we deal with climatic change; and from soils of lower or higher productivity depending on how we deal with economic, agricultural, trade and aid policies that now induce practices which erode soils, waste water, destroy forests and advance deserts. The transitions underway in the industrial sector can result in more or less resource consumption per unit of production, and more or less environmental pollution. That depends, however, on how we deal with a range of economic, financial, trade, aid and regional development policies that could be deployed to induce industry to employ cleaner rather than dirtier technologies, processes and products.

4. The ability to choose policy paths that are sustainable rather than unsustainable requires that the ecological dimensions of policy be considered at the same time as the economic, trade, energy, agricultural, industrial and other dimensions, on the same agendas and in the same national and international institutions. That is the chief institutional challenge of the '90s. Can it be met?

5. There is no doubt that it will require an enormous effort of national leadership and international co-operation. It will require new priorities reflecting a

fresh analysis of the relationships between environment and development. Most difficult of all, it will require a shift in the entrenched mind sets of venerable institutions.

6. The first section of this Chapter recalls the multiple transitions now underway and the new realities imposed by them. It discusses the priority requirement to break out of the poverty-environment degradation cycle, to transcend narrow national viewpoints and boundaries, and to act on the imperatives for institutional change and renewed international co-operation. The second section sets out some of the main new directions for change: the need to shift the focus of our central and sectoral institutions, public and private, from symptoms to sources, to strengthen our capacity to protect the environmental resource base of development, to develop increased capacities for crisis management and to strengthen legal regimes as one of the principal tools for prevention. Finally, we set out our proposals for change in the legal and institutional framework for environment and development discussing them under eight major thrusts for action.

I. THE CHALLENGE TO CHANGE

7. Recent State of the Environment Reports^{1/} demonstrate that during the past 15 years, only a few countries have managed an improvement in the quality of their environment and the ecological basis of their development. They are all rich, industrialized nations, and even within these nations, the improvements were spread unevenly. Some richer industrialized nations suffered a severe degradation in parts of their environmental resource base and, as previous chapters

have demonstrated, all still suffer huge economic burdens from first generation problems: air and water pollution, especially from non-point sources like agriculture, depletion of groundwater, chemicals and hazardous wastes; industrial accidents.

8. At the same time, a second generation of problems has emerged, more complex than those presented by conventional pollution and implying heavier social and economic costs, whether action is taken or delayed. Many of them are related to economic, trade, agriculture and forestry policy: including soil erosion, loss of cropland and forest depletion through over-cutting and acidification. Many are related to energy policy: acidification of the environment, nuclear wastes and safety, introduction of energy-efficient technologies and conservation. Others are related to industrial policy: testing the backlog of existing chemicals and testing new chemicals before they go on the market; controlling the movements of hazardous wastes; increasing resource recovery and recycling; introducing resource and environmentally efficient technologies, products and processes.

9. While all countries now face a growing range of both first and second generation problems, the locus of the environment and development problematique, in the Commission's view, has undergone a significant shift toward developing countries. Most of them have experienced a massive deterioration of the essential environment and resource base of their development, with problems associated with sudden industrialization and explosive urbanization being added to those associated with under-development and poverty. The ecological capital with which most countries were blessed is being consumed at an increasing rate. It is not being replaced. In countries such as in Africa, the critical balance between people, economy and ecology has been

eroded to the point where environmental degradation has become a major cause of economic decline and social and political unrest and a major threat to national and regional security. Many current paths to development are not only not sustainable but also, with the mounting demands for resources built into current trends, they can and in many developing regions they already have pushed populations over the brink of survival.

1. Poverty, Degradation and the Declining Potential for Development

10. Growing poverty and environmental degradation are the blunt realities for increasing millions of the world's people. In many developing countries poverty is the principal source of environmental degradation and its principal effect. Poverty-induced environmental destruction is growing in countries throughout Africa, Asia and Latin America, especially in the least developed rural areas where life for many is precariously balanced between subsistence and disaster. Their present and future prospects are circumscribed by a combination of ecological decline, limited options and national and international policies over which they have little influence and no control.

11. The downward spiral of poverty-induced resource destruction undermining development has spread rapidly over the past few decades, embracing not only entire nations but also, as with desertification, spilling over into neighbouring countries. While nations and the international community have long recognized the special needs of the poor and a variety of programmes have been mounted, the world's family of absolutely poor has grown larger not smaller.

12. What has been done is clearly not enough. More significantly, what has been done clearly does not get at the real sources of the problems. As the analysis in previous chapters of this report demonstrates, many economic, trade, aid, agricultural, energy and other policies that are now in place serve to undermine the potential for development and reinforce the twinned syndromes of environmental degradation and economic decline.

13. The Commission has proposed an urgent and continuing reorientation of these policies to give them ecological eyes and to shift development from presently non-sustainable to more sustainable paths. The Commission is aware that such a reorientation on a continuing basis is simply beyond the reach of present decision structures and institutional arrangements, both national and international. It requires that the implications of development policies for environment and resource management be considered at the same time as the development policies themselves, on the same agendas and by the same institutions, nationally and internationally. At the moment they are not, often for structural reasons. International institutional arrangements usually reflect those at the national level, and new arrangements that make central and sectoral agencies responsible for sustainable development need to be put in place at both levels.

2. Confronting New Realities

14. The perception and experience of reality has been transformed in less than a decade. Political and economic realities were invoked repeatedly in the 1970's to resist or even dismiss many proposals for stronger measures to protect environmental resources, and to integrate environmental resource management and economic

development. Today, the reality of linked environment and economic decline in large parts of the world is exposing the lack of realism both of many prevailing development policies and practices, and of the institutional arrangements and decision processes behind them.

15. This generation and the next face a series of fundamental changes and major transitions that exceed all historical experience. The world is passing through a number of transitions, each related to and dependent on the other: a demographic transition to a world population of between 8 to 13 billion people, living largely in urban rather than rural settlements; an economic transition with a five to ten-fold increase in economic activity in less than half a century; a technological transition to beneficial but higher risk technologies, including the manipulation of existing and the introduction of new life forms; and, as described in previous Chapters, equally fundamental transitions in energy, industry, agriculture and forestry.

16. In and of themselves, of course, the separate transitions are not new. But taken together, collapsed in time, and viewed against some of their dominant characteristics, they could reflect a fundamental change in the relationships between the human world and its development on the one hand and the planet earth and its ecosystems on the other.

17. The transition and the issues it is forcing on a reluctant world are marked by many of the same characteristics. A rising pace of change is one. An enormous increase in the scale of change, along with a vast extension in the geographical reach of the impacts

of that change is another. Both are marked by varying degrees of uncertainty and irreversibility, and by an ability, reinforced by political processes, to transfer costs to future generations.

18. The dominant characteristic of the transitions and the issues is an accelerating interdependence, not just economic interdependence, nor just ecological interdependence, but the two combined, interlocked locally, regionally and globally by a giant seamless net. As a result, the decline or growth of economies has become increasingly a function of the decline or enhancement of the ecosystems on which they depend.

19. The emerging new realities and issues require a fundamental change in the way we think and act about environment and development, and about international co-operation. Until recently, our main concerns centred on the effects of development on the environment. Today, we need to be just as concerned about the links from the environment to the economy. In one area after another, it is these reverse effects that condition the potential for development.

20. Local communities have known this for generations. If a community ran out of water, it ran out of economic potential. As noted in earlier Chapters, the same thing is now evident at the regional scale, including for example, desertification, famine and ecological refugees in Africa; deforestation in Asia and Latin America; and acid rain and radioactive fallout in Europe. It is also evident at the global scale in, for example, the dispersion of certain chemicals and their concentration in food chains; the rapid disappearance of forest cover and in the loss of genetic resources; the rising levels of greenhouse gases and the growing risk of climate change; and the loss of soil productivity in both industrialized and developing countries.

21. In the real world, we are witnessing a complete unification of environment and development and of economics and ecology. In our governments and international institutions, however, and in our industries which pride themselves on being in touch with the real world, we find the reverse. Those responsible for managing natural resources and protecting the environment are institutionally isolated from those responsible for managing the economy. As the real world will not change, our present policies and institutions must.

3. New Threats to Security, Peace and Survival^{2/}

22. As we move through the transition with environmental crisis deepening and spreading through wider areas, nations will find that environmental degradation presents a greater threat to their security - and even survival - than armed neighbours and unfriendly alliances. Many nations already have. In parts of Central and South America, Asia, the Middle East and, most of all, in Africa, environmental degradation is a major source of economic decline, social crisis and political unrest. This is manifest in the increasing frequency and intensity of disasters and in the growing migrations of ecological refugees within and across national borders.

23. While the links between environmental impoverishment and conflict are seldom simple, in recent years, we have seen environmental degradation in many regions trigger a sequence of natural and man-made events leading to famine, bread-riots and social destabilization. The process spills out beyond national frontiers to destabilize entire regions.

24. While the environmental sources of conflict grow, the environmental consequences of warfare have received more attention. Warfare, conventional, chemical and nuclear, constitutes an ever present threat to the environment, and nuclear warfare, followed by a "nuclear winter", presents a clear danger to the survival of man. Both add an environmental imperative to the prevention of conflict.

25. On a global scale, environmental degradation also presents new threats to the security of all nations, which will mount dangerously as we proceed through the transition. Climate change in the wake of the build-up of greenhouse gases and the decline of tropical forests is perhaps the most dramatic example of this, but the accelerating loss of the globe's genetic stock could be more serious.^{3/} The rapid depletion of the ozone shield suggested by recent evidence, with its threat to sensitive phyto plankton and fish larvae floating on the oceans' surfaces, has enormous implications for planetary support systems. Exposure to chemicals takes an increasing toll in human lives each year, but the slow, silent accumulation of chemicals and radioactive substances in food chains could pose an even greater threat to man and his genetic integrity.

26. In spite of the growing scale and impact of environmental degradation on a nation's potential for development and on its relationships with its neighbours, governments seldom, if ever, recognize it as part of their security problem. Nor do they view threats to life support systems, regionally and globally, as a part of the problem of global security. One test of this is in the structure of budgets in both government and industry; another is in the structure of institutional arrangements and in the distribution of power in various ministries and departments around a cabinet table or industrial board room.

27. Concerning budgets, for example, world military expenditures are estimated to reach an annual level of over one trillion dollars in 1986 and they continue to grow at an annual average rate of 3-4 per cent in real terms. Yet, no government and no international organization has access to advice that reflects an assessment of the potential gains to security from expenditures on military preparedness against the potential gains from expenditures on restoring the ecological bases for development. Concerning institutional arrangements, few foreign ministries and, to the Commission's knowledge, no defence agencies are mandated or structured to consider environmental threats to peace and security. Significant changes in institutional arrangements need to be considered, nationally and internationally, reflecting a new and broader concept of security.

4. Looking Beyond National Boundaries

28. The new issues cannot be separated from the policies that underpin them. Even though these policies may be considered "domestic affairs" and "matters of strictly national concern", their capacity to undermine the essential ecological basis for development - and survival - in other countries, makes them matters of international concern.

29. National boundaries have in fact become so porous that traditional distinctions between matters of local, national and international significance have become blurred and even impractical. While there are many areas in which these distinctions are still considered vital to the fundamental sovereignty of the community or nation,

guarding them across the board with ancient attitudes, laws and institutions can lead countries perversely to act against their own self interest, surely the height of folly.

30. Today, the reach of national policies is exceeded only by the limits of national solutions. Central economic, trade and monetary policies provide many examples of this as do sectoral policies in most areas. Take agriculture, as discussed in Chapter 5. The links between the rich, incentive driven agriculture of the industrialized market economies and the poor and often neglected agriculture of developing countries helps to explain the growing degradation of soils and other resources in both.^{4/}

31. Each nation may devise national agricultural policies to secure short-term gains, economic and political, but no nation alone can devise and implement solutions to deal with the financial, economic and ecological costs of these policies, as they are intimately linked with international trade. The World Bank estimates the financial burden of these policies at over \$41 billion a year.^{5/} Global estimates of the economic costs of the ecological damage induced by these policies do not exist,^{6/} but they no doubt exceed by far the direct financial costs and they are growing rapidly.

32. One estimate places the net annual loss of topsoil in excess of new soil formation in the order of 25.4 billion tons.^{7/} This loss is rapidly reducing the inherent productivity of the world's limited stock of agricultural land. While nations can off-set falling productivity for a limited period of time by increased use of fertilizers, in most of North America and Europe fertilizer application has passed the point of

diminishing returns. In other countries, especially some in Africa, soil loss over the centuries has reduced the productivity of much of the land to zero.

33. Forestry, as discussed in Chapter 6, provides another example where the reach of national action exceeds the limits of national solutions. Reliable data are difficult to come by, but until the beginning of the nineteenth century, forests and woodlands covered some six billion hectares of land, about one-third of the world's surface land. By 1954 the total had declined to four billion hectares.^{8/} This one third reduction was caused by increased land use for agriculture, pasture and human settlements and by timber cutting beyond sustainable yields.

34. Both soil loss and the accelerating destruction of forests are for the most part induced by man-made policies. Moreover, the accelerating decline of the past decades cannot be explained unless the international links between the agricultural, settlement and industrial policies of certain developing countries and the trade and aid policies of some industrialized countries are examined.^{9/} Until recently, most North American and European governments have sought to avoid investments needed to prevent acidification. Some still do. In Asia, Africa and Latin America, governments are actively promoting the settlement of forest lands through land grants and resettlement schemes and the opening of precarious roads.^{10/} These roads and settlements are sometimes financed through international banks and multilateral and bilateral assistance agencies, under policies and programmes that are not assessed to determine whether the development being promoted is

sustainable or not.^{11/} With the recent exception of the Tropical Timber Trade Agreement, trade policies for agricultural and forestry products have totally ignored their impact on the environmental resource base of both exporting and importing countries.

35. The desire for least-cost energy and the need for foreign currency to retire a nation's debt and improve its balance of payments can make it extremely tempting to postpone action on acidification, to induce farming on marginal land or to cut down yet one more forest. Experts in short-term accounting can always justify the economics involved, even though the justification often rests implicitly on a form of ecological deficit financing.

36. In most national governments, responsibility for these decisions rests with central, economic or trade and sectoral agencies isolated from and infinitely more powerful than the single, often small agency mandated to protect the environment. As a rule, governments do not seek or obtain advice on the sustainability of the policies pressed on them by central and sectoral agencies. The same is true of most international agencies. The banks and multilateral and bilateral assistance agencies are now aware of links between environment and development, but few have articulated a policy to cover them or reflected that policy in their budgets, organization and staffing.^{12/}

37. The Commission has noted that all projections of world food supply and demand incorporate projections for croplands, but none take into account the annual loss in productivity through accelerating erosion of the world's stock of agricultural land. Few governments have the slightest idea of the size of their soil or forest bank,

nor at the rate at which it is being drawn down. Yet they ought to know and they ought to be held as accountable for it as they are of their financial budget and economic accounts.

5. The Growing Gap

38. The critical issues raised by the great transition, reveal a large and growing gap between man's capacity to change the biosphere through development, which is leaping upwards at unprecedented rates, and his capacity to manage those changes in the interests of both the biosphere and development, which is at a comparative standstill. Some attempts have been made to narrow this gap and a number of successes can be identified. But the general response to date has been largely one of fear and retrenchment around old institutional forms, with governments pulling ever more insistently at levers that are no longer connected effectively to the forces they are designed to influence.^{13/}

39. The characteristics of the new class of issues stand out in sharp contrast to the characteristics of the institutional framework we have inherited to deal with them: interdependent issues versus independent institutions; integration versus fragmentation; horizontal versus vertical; a need for comprehensive approaches versus narrow mandates; a need to deal with changing groups of issues clustered dynamically around several policy sources versus rigidity and territoriality; a need for open involvement of citizens groups, non-governmental organizations, and industry with freedom of information flows versus closed decision

processes and secrecy; a 20th century need and 21st century imperative to manage issues that reach across frontiers versus concepts of sovereignty and security inherited largely from the 19th century.

40. This gap is most striking and it is widening most rapidly at the international level. In fact, the most perilous paradox of the past decade has been the steady erosion of support for international co-operation in face of the rapidly rising need for it.

41. Achieving sustainable development during the current transition will require a common effort of unprecedented proportions to reorient certain economic, trade, aid, energy, agricultural and other policies that underlie many unsustainable forms of development. Yet, instead of pulling together, key nations seem to be on a collision course in all of the critical policy areas: trade, agricultural subsidies, energy, aid, industrial protection. Their disputes usually concern how to maintain national advantage in the very policies that hamper development globally, rather than how to devise new policies that would speed development along sustainable paths. The agendas around which nations gather to discuss their differences and the vocabulary of their disputes reflect no understanding of the new unity of environment and development, or the new realities of ecological and economic interdependence.

42. The results are all too clear in the opportunities missed in the areas of macro-economic performance, trade and development; in the now third energy shock, the consequences of which could further undermine the ecological basis for future development; and in the opportunities missed for strengthening the human and physical resource base for food security in Africa and Latin America. The results are also clear in the growing number, frequency and scale of crises to be confronted.

43. By the mid-1980's, multilateral institutions were under siege for many and often contradictory reasons: for either proposing to do too much or more frequently for doing too little. The zero-sum of conflicting national interests blocked significant reforms and accentuated the need for fundamental change. The United Nations system itself, after over three decades of gradual post-war development, came under increasing attack, at times for what it proposed to do but, more often, for what it was clearly incapable of doing. East-West co-operation declined, and tensions increased.

44. Funds for intergovernmental organizations declined both in relative and absolute terms. Even bilateral development assistance declined, and many developed countries never came close to the percentage targets they proposed in the early 1970's. The benefits and effectiveness of development assistance also came under serious question, in part because of "ecologically blind" policies and projects leading to unsustainable forms of development. This further undermined confidence in and support for development assistance and co-operation. The perverse cycle continued while its effects increased the need for even greater international aid and co-operation.

45. The decline in the last decade in political and financial support for multilateral co-operation, institutions and dialogue must be reversed. Otherwise, we will face a future of missed opportunities, increasing crisis, and a downward spiral of ecological and economic collapse.

II. NEW DIRECTIONS FOR CHANGE

46. It is quite clear that the standard pollute-and-cure, or react-and-retrofit approach to environmental management that was adopted in the early 1970's is no longer working effectively in the richer industrialized countries, and has never worked in the developing countries. The damage effects of development are growing faster than environmental managers can keep up with them, in both developed and developing countries. We are falling behind on just about every front and, given the trends through the year 2000, we will continue to do so unless we begin seriously to address the implications of the transition for our institutional arrangements. Those implications revolve around much broader concepts of "environmental policies", "environmental agencies" and "environmental budgets" than we have inherited.

1. Shifting the Focus from Symptoms to Sources

47. Early in its work the Commission decided that if it was to "take a fresh look at the critical issues of environment and development", to quote from its mandate, it would need to adopt a new way of looking at the issues. Subsequently, it drew attention to two distinct approaches to environmental management.^{14/} One, which it represented in a "standard agenda", reflects a symptoms-oriented approach to environmental policy, laws and institutions. The second, which it embraced in a new "alternative agenda", reflected a source-oriented approach.

48. As is evident from this report, these two approaches result in two different ways of looking both at the issues and at the institutions we have developed

to manage the issues. Both approaches are both essential. But, up to the present, only the first, the symptoms approach, has been reflected in our institutions.

2. The Symptoms Mandate

49. In both developed and in developing countries, environmental and resource "protection" agencies have evolved within a very narrow concept of environmental or resource conservation policy. The

BOX on Standard Agenda, Symptoms-oriented Approach

standard or Symptoms Mandate given to environmental and conservation agencies - and this to almost all organizations, public and private, concerned with the environment - tends to focus attention and action on effects of development: damage to health, property, resources, wildlife and wild lands. It tends to examine these effects as if they were the real "environmental issues", when the real issues are the sources of the effects, the development policies which generate them.

50. Moreover, the Symptoms Mandate tends to examine the issues as environment issues alone, or as resource or conservation issues, rather than as development issues or as joint development-and- environment issues. It tends to examine each of the issues in isolation rather than bringing them together around the development policies which provide their common source. This approach has produced a long list of after-the-fact measures: restoring lands, retrofitting industries, dams and irrigation projects; reforesting watersheds, reclaiming desert lands, rebuilding the urban environment, and rehabilitating wild lands.

51. The quality of the environment is the central concern of the Symptoms Mandate. It expresses itself in policies targeted on substances and products, on industries and urban regions, and on environmental resources such as air, water, soil, forests, coastal and marine waters, fish and wildlife and their habitats. These policies are developed and delivered through institutions and laws organized in essentially the same way: i.e. substances (e.g. air or water pollutants, chemicals, etc...); products (e.g. automobiles, electrical appliances, aerosol cans); industrial groupings; decentralized regional or sub-regional offices; and departments or separate agencies for the management of air, water, soils, forests, and other environmental resources.

52. The Symptoms Mandate was a natural response to the growing concern about the dramatic decline in environmental quality that the industrialized world suffered during the 1950s and 1960s. Near the end of the 1960s, the task was to clean-up the mess left by 20 years of rapid and unrestricted growth. Environmental protection and resource management agencies were added on to the existing bureaucratic structure, given mainly scientific staffs (little was known about the phenomena) and mandated to focus largely - and often only - on the effects of activities impacting on man or the natural environment.

53. The same is true of the environmental protection and resource management agencies that were later established in developing countries. They were either a product of similar concerns - (i.e. the effects of development on health, property, resources and the environment) or they were modelled after those in industrialized countries. Some were established quite

early; others much later.^{15/} Today, over 100 developing countries have environment agencies^{16/}, a ten-fold increase since the Stockholm Conference in 1972.

54. Like those in industrialized countries, they vary greatly in effectiveness. A few are substantial agencies, with an evolving monitoring and research capacity and solid programmes targeted on polluting substances and products, on industrial sectors, or on the management of air, water, forests, wildlife and other environmental resources. Most, however, are very small and weak, with no real political power and with resources that bear no relationship to their broad mandates and rapidly growing needs and responsibilities.

55. There is no doubt that environment agencies have registered some notable successes in improving environmental quality during the past two decades.^{17/} They have secured significant gains in monitoring and research, in defining and understanding the issues in scientific and technical terms, in inducing innovation and new control technologies, processes and products in most industries, and generally in reducing the resource content of growth. They have also raised public awareness, nationally and internationally.

56. Some of these achievements are global or regional in nature, but most of them are to be found within and among a few of the richer industrialized countries. Even within these countries, as has been noted, progress has been very uneven. Many have not caught-up with the backlog of conventional pollution problems; a new generation of environmental pollution issues has overtaken their effects-oriented policies and programmes;

and a range of economic, financial, trade, energy, agriculture and other sectoral policies act to degrade the environmental resource base essential for their future development.

57. As for developing countries, they simply have not been able to afford the costs of clean-up-after-pollution, or restoration-after-degradation. In many countries, the massive ongoing degradation of the environmental resource base has seriously undermined their potential for development and, in some areas, it threatens survival itself.

58. Whatever the intentions of some leaders in the late 1960's, environmental and conservation institutions were given a role separate and distinct from development, a role related directly to the treatment of air and water pollution and to the conservation of nature, parks and species. They were asked to deal with the symptoms - ameliorating environmental and resource damage - because the symptoms had got out of hand. They were not asked to deal with causes.

59. The initial mandates of some of these agencies are case-studies in turf-definition. In a few cases, their founding legislation or executive-orders state, in one way or another, that apart from the responsibilities explicitly given to them for the management of air, water, lands, forests and other environmental resources, apart from those responsibilities narrowly defined, the agencies' responsibilities for policy, research and co-ordination shall include everything not already assigned to any other agency. Which doesn't leave much room for manoeuvre.

3. The Sources Mandate

60. In most developing and in some developed countries, regardless of the sophistication of the government structure, effective decision-making power tends to be concentrated at the top and in a few central agencies such as a Finance Ministry, a National Planning Commission, a Bureau of the Budget, a Department of Trade and a Foreign Ministry. Beyond these central agencies, governments everywhere are organized along so-called "productive sectors" - with Ministers or Departments of Energy, Agriculture, Industry and Transport. Within these agencies, policy decisions are normally made without any consideration of their impact on resources and the environment by decision makers who have other priorities.

61. Yet, as this report demonstrates throughout, these policies are the real "environmental policies". These agencies are the real "environmental agencies" and their budgets are the real "environmental budgets". It is these agencies which most influence the form, character and distribution of the impacts of economic activity on the environmental resource base. It is they, their policies and budgets which determine whether the environmental resource base is enhanced or destroyed and whether the planet will be able to support human and economic growth and change beyond the year 2000.

62. The mandated priorities of these agencies are economic and social development, investment, employment, food, energy, security and other goals. They have no mandate to be concerned with sustaining the environmental and resource capital on which these goals depend. Those who do have such a mandate, as noted above, are usually grouped in separate environment agencies whose Minister, reflecting their power, is often last on the protocol

list. Sometimes, they are to be found in minor units of sectoral agencies. In either case, they usually learn of new initiatives in economic and trade policy, energy and agricultural policy or of new tax measures that will impact heavily on the resource and environment base of development long after the effective decisions have been taken.

63. Even if they were to learn earlier, there is little they could do to ensure that the policy concerned induced development that was sustainable. This is not only because governments and international organizations have yet to adopt requirements for prior assessment of policies (as opposed to projects). It is also because few environmental agencies have developed any institutional capacity to undertake the economic and political analysis required to attract seriously the attention of these agencies. They usually also lack the professional resources and expertise needed to argue their case effectively in the inter-agency committees where advice on macro-economic, trade, agriculture and energy policy is formulated; and in the corridors where the decisions are effectively taken.

64. This must change. Given the accelerating pace of change and the primal character of the transitions through which the world is passing, nations and the international community must move quickly to reflect a broader concept of "environmental agencies", "environmental policies" and "environmental budgets" in their institutional arrangements - one that can address the real sources of environmental and economic decline and launch a new era of sustainable growth.

65. The challenge is to institutionalize a Sources Mandate in the central economic and sectoral agencies of government and major institutions in the private sector. They must be made responsible and accountable for ensuring that their policies, programmes and budgets encourage and support activities which are economically and ecologically sustainable both in the short term and over the longer term. They must be given a new mandate to pursue not only the goals of growth, employment, food, energy and security but also to deploy their budgets in such a way that those goals are reinforced by a steady enhancement of the environmental resource base of the community, nation and the earth as a whole.

66. If a Sources Mandate is not introduced in the central and sectoral agencies of government and major private institutions, nationally and internationally, the Commission sees no possibility of keeping ahead of the race to the limits of survival, let alone of seizing the promise of new technologies and drawing steadily back from those limits.

67. The introduction of a Sources Mandate offers the possibility of gradually reducing the aggregate negative impacts of development on environment and hence on itself. It offers the possibility of slowly reversing linked environment and economic decline syndromes. Moving away from the react-and-cure approach of the Symptoms Mandate toward the anticipate-and-prevent approach that only a Sources Mandate would make possible, could help to make environmental quality a side-effect of sustainable development.

68. The Symptoms Mandate has the in-built effect of delaying reaction to damage done for as long as possible. First, its approach is far less efficient economically and far more expensive financially than the

Sources Mandate - indeed it is beyond the reach of all poor and, increasingly, most rich countries. Second, it produces acrimonious and sterile disputes about the symptoms and about whether enough research and information is available to justify any reaction other than more research. Those nations who feel least affected by a phenomenon often demand the highest degrees of certainty before agreeing on reaction.

69. The tremendous speed of the Global Transition will no longer accommodate such an approach. In areas such as desertification, genetic spasm, acid precipitation, greenhouse climate change, ozone depletion, chemicals in the food chain and certain types of catastrophic accidents, certainty as to degrees of risk and damage may come only after damage is so extensive that cure is technically, economically or politically impossible.

4. Coping with the Momentum of Mal-Development

70. The transition towards sustainable development must begin now, but will take years and even decades to achieve. As we gradually move our central and sectoral institutions into a new Sources Mandate, it is quite clear from the trends and from the speed of the global transition, that the negative damage effects of development will continue to grow and to spread.

71. Thus, the Symptoms Mandate remains an absolute necessity, as do the environmental protection and resource management agencies who base their work upon it, both nationally and internationally. They must be strengthened in terms of staff, budgets and access to the key decision-making processes.

72. These agencies possess the knowledge about the environmental resource base needed by central and sectoral agencies as they take on their new responsibilities under the Sources Mandate. That knowledge base needs to be extended as rapidly as possible; and, of course, the central and sectoral agencies will need to develop their own base of knowledge and expertise concerning the relationships between the goals and policies for which those goals and policies are responsible and the sustainability of the environmental resource base on which they depend.

73. The environmental and resource agencies will also need to increase the effectiveness and efficiency of their react-and-restore measures, whether in the field of restoring lands, forests and waters, retrofitting industries or rehabilitating habitats. The demand for these measures is going to grow phenomenally until the Sources Mandate begins to show results. In addition, these agencies will need to provide support for national and international measures to respond to an increasing frequency and scale of crises.

74. During the 1970s, twice as many people suffered each year from "natural" disasters as during the 1960s. The disasters most directly associated with population, settlement and environmentally insensitive development - droughts and floods - increased most terms of numbers affected. There were 18.5 million drought victims annually in the 1960s, 24.4 million in the 1970s.^{18/} There were 5.2 million flood victims yearly in the 1960s, 15.4 million in the 1970s.

75. The results are not in for the 1980s. During the approximately 900 days between the first meeting of the Commission and the release of its report, the world experienced several severe cases of environment and

development failure (see Box). They stemmed not only from a failure to anticipate but, in most cases, also from an incapacity -- a political and management incapacity -- to act on the basis of anticipation. These failures will continue to grow until the Sources Mandate is in place and working.

BOX

The World Commission on Environment and Development first met in October, 1984, and published its Report 900 days later in April, 1986. Over those few days:

- * The environmental crisis in Africa peaked, putting 30 million people at risk, killing perhaps a million.
 - * A leak from a pesticides factory killed over 2,000 people and blinded and injured thousands more in Bhopal, India.
 - * Liquid gas tanks exploded in Mexico City, killing 1,000 and leaving thousands more homeless.
 - * The Chernobyl nuclear reactor explosion killed 20 people immediately and sent nuclear fallout across Europe, damaging agricultural produce and threatening future human cancers.
 - * Agricultural chemicals, solvents and mercury flowed into the Rhine River during a warehouse fire in Switzerland, killing millions of fish and threatening drinking water in West Germany and the Netherlands.
 - * A company based in the United States tested a genetically-altered, living viral rabies vaccine in Argentina without notifying the government there.
 - * An estimated 60 million people died of diarrhoeal diseases related to unsafe drinking water and malnutrition; most of the victims were children.
-

76. The continuing African crisis is but one compelling example of how our present institutions fail on all counts: in preventing or even anticipating situations in which a crisis response will be needed; in generating the political will and capacity to respond; and in the

effectiveness of the response undertaken. Each crisis has generated its own ad hoc emergency and co-ordination machinery, without creating an increasingly effective and on-going management capacity for dealing with what could soon be a series of overlapping or even parallel crises.

77. There can be little doubt, given future disasters already in the pipeline of mal-development, that the overall situation is going to get worse while we struggle to adapt our policies and institutions to make it better. Consequently, for and during the transition to sustainable development, the world needs to strengthen those institutions dealing with the Symptoms Mandate, national and international, and its capacity to anticipate, respond to and manage development based environmental crises.

5. Strengthen the Legal Framework

78. As with institutions, national and international law for the protection of the environment has too often been developed only after damage has already occurred, as a piece-meal and incremental addition to the existing legal framework. Moreover, once in place it is too often not enforced, especially at the international level.

79. In just over two decades, since 1960, more than twice as many multilateral convention related to environment were negotiated and signed than existed before, with the United Nations Conference on the Human Environment at Stockholm in 1972 serving as the major pivotal and transitional point in that accelerating process. However, with a few important exceptions, many of the multilateral agreements concluded in the 1960's largely supplemented or extended existing conventions (e.g. on marine pollution and the conservation of ocean living resources), or were applications in new regions of

principles and procedures already established in others (e.g. such as those on international rivers in Africa, Asia and South America). A unique exception was the 1967 Outer Space Treaty which established the new concept of a global commons as "the province of all mankind", and that any exploration and use of it "should be carried on for the benefit of all people".

80. Since 1970, a new series of global and regional agreements have been concluded, stimulated in large part by the new knowledge and public and political concern generated for and by the 1972 Stockholm Conference. Four distinctive and major thrusts have been:

- * the conservation of endangered species and habitats of international significance (e.g. conventions on wetlands in 1971, on protecting the World Cultural and Natural Heritage in 1972, on International Trade in Endangered Species in 1973, on Conservation of Migratory Species in 1979);
- * the negotiations over a decade on a new and comprehensive oceans legal regime, culminating in the 1982 signature of the Law of the Sea Treaty;
- * development of multilateral agreements and action plans for major regional seas (e.g. Baltic in 1974, Mediterranean in 1976, Kuwait Regional Convention in 1978, South-East Pacific in 1981, Red Sea and Gulf of Aden in 1982, Caribbean in 1983);
- * new multilateral agreement and joint programmes for monitoring, evaluating and eventually reducing long-range transmission of air pollution (e.g. Geneva Convention on Long-Range Transboundary Air Pollution in 1979).

81. In addition to these main thrusts, two conventions dealt with entirely new issues related to military activities (e.g. Convention on Prohibition of Military or any other Hostile Use of Environment Modification Techniques in 1977).

82. Despite this relatively rapid development of legal principles, guidelines, rules and procedures, as a body of law and potential international legal framework, there are still major deficiencies to overcome before it can be considered adequate and effective in relation to the emerging and even present problems of environment and development:

- * it lacks consistency and coherence as it has developed in a largely episodic, incremental and ad hoc manner;
- * it reflects a predominantly react-and-cure rather than anticipate-and-prevent approach as it developed largely in response to situations where significant damage ahead already occurred or appeared imminent (e.g. preservation of endangered species instead of biological diversity);
- * it has many significant gaps, and priority issues on the new or even standard agenda are not addressed (e.g. international trade and disposal of hazardous chemicals and wastes);
- * it deals largely with the mutual obligations of sovereign states to each other and too little with the collective rights and responsibilities of all peoples and nations (e.g. with respect to areas outside national jurisdictions, to future generation or even other species).

83. These gaps and deficiencies must be overcome as part of the transition to sustainable development. Even then, however, the international legal framework would still lack a major attribute that has proven essential to the effectiveness of all other legal systems: the ability to induce and enforce compliance when necessary. All communities and nations have at least some common rules which are enforceable and enforced. Given the characteristics and global implications of the new issues and risks, the viability of the community of nations will require a similar capacity to promote and protect common interests. Much of the evidence and conclusions presented in earlier chapters of this report call into question not just the desirability but even the feasibility of maintaining as absolute the sovereign rights of one or several states to ignore or harm the environment and interests of any other or even all other states.

III. PRIORITY THRUSTS FOR LEGAL AND INSTITUTIONAL CHANGE

84. Eight priority thrusts for change in our institutional arrangements, our legal regimes and decision-processes emerge from the body of the Commission's analysis. They are:

- * Getting at the Sources: introduce the Sources Mandate and make central economic planning, finance, trade and sectoral agencies responsible and accountable for ensuring that their policies, programmes and budgets induce development that is sustainable.
- * Dealing with the Symptoms: strengthen the capacity of existing environmental protection and resource management agencies to deal with the Symptoms Mandate.

- * Ensuring Survival: establish the institutional capacity needed to assess and report on critical threats to survival, security and well-being.
- * Reconciling Rights and Responsibilities: enact new norms for state and inter-state behaviour to secure sustainable development.
- * Managing the Commons: strengthen and extend the capacity to manage the international commons.
- * Taking Effective Regional Action: increase capacity to deal with bilateral and regional issues.
- * Making Informed Choices: expand the role and participation of NGOs, the scientific community and industry in decision making.
- * Investing in Our Future: increase national and international financial support for environmental resource protection and sustainable development.

1. Getting at the Sources

85. In the view of the Commission, it is now essential and urgent to bring environment and sustainable development into the centre of decision making on economic, finance, trade and sectoral policies in government and industry, nationally and internally.

1.1. Reorienting National Institutions and Policies

86. How this is done will vary from country to country of course, reflecting the many different political and economic systems around the world. Nevertheless, there are several major features concerning what needs to be done that are common to all countries.

87. First, sustainable development objectives and criteria must be built into and become a central concern of national political processes and institutions. In countries with parliamentary forms of government, for example, sustainable development objectives and criteria could be incorporated in the formal mandates and terms of reference of those Cabinet and legislative Committees dealing with national macro-economic policy, planning and priorities; those dealing with major sectoral policies in areas such as agriculture, energy and industry; and, equally important given the many economic and ecological interdependencies described earlier in this report, those dealing with trade policies and foreign affairs.

88. Second, the central economic, planning, finance, trade and sectoral agencies of governments should now be made responsible and held accountable for ensuring that their policies, programmes and budgets induce development and encourage and support activities that are sustainable, ecologically as well as economically, both in the short term and over the longer term.

89. In most cases this will mean giving a new mandate, "a Sources Mandate, to these agencies, requiring them, to pursue not only the goals of economic growth, employment, food, energy and security, but also to deploy their budgets (including taxes, grants, incentives and disincentives) in such a way that those goals are reinforced by a steady enhancement of the environmental

resource base of the community and nation. Indeed, in the future, the budgets of these agencies should be seen as budgets for "sustainable" national development, and the central and sectoral agencies concerned should be responsible for providing directly from these budgets the financial resources needed to protect, restore or improve the environmental resource base being employed in any activity.

90. Third, in order to obtain a realistic account of the real health and wealth of the national economy, and to assess progress towards sustainable development, governments should complement their traditional annual fiscal budget with a report and audit on changes in the quality of the nation's environment and in the stock of the nation's assets of environmental resource capital. This could be done in a variety of ways. All central and sectoral departments would necessarily share in this responsibility and contribute to this report, but governments could and probably should designate a senior Minister responsible for preparing and issuing such an annual sustainable development report and audit.

91. The transition to the Sources Mandate will take time, the development of new information bases and expertise. In order to facilitate this transition, and until such time as the Sources Mandate is well entrenched in the various central and sectoral agencies, governments may wish to establish a small but high level office, with the authority and capacity to oversee the introduction of the new mandate. In addition to bringing together an information base, it could assess and advise on the implications for sustainable development of certain high-impact economic, finance, trade, energy, agriculture and other sectoral policies. It could also prepare the annual sustainable development report and alert the government and nation to evolving development-based

survival issues. Such a transition "office for sustainable development" should be attached to a major, central department and report to a high-level Minister.

92. Finally, as the Commission's report demonstrates, given the speed and increasing scale of impact of change and the growing reach of national policies, nations need to develop a "foreign policy for the environment". Such a policy would comprehend the degree to which national well-being is increasingly dependent on the environmental resource base of other nations and the global commons; the impact of a nation's policies on the sustainability of that resource base and the impact of other nation's policies on the sustainable of its own environment and resources. It would identify the trade-offs involved and articulate the goals and policies to be pursued by the nation's representatives in international fora, bilateral, regional and multilateral.

93. A "foreign policy for the environment" would, of course, deal with questions concerning the management of shared resources and upstream and upwind development threats to a nation's air, land and water resources. It would deal with regional and global threats to survival such as climate change and genetic spasm. A "foreign policy for the environment" could also address aspects of foreign investment, technology transfer, trade in commodities, imports and exports, in chemicals, hazardous wastes and other polluting substances, experiments and trade in genetically engineered life forms, and development assistance. Such a broadly based foreign and trade policy for environment could enable each nation to identify a broader range of potential trade-offs with other nations, and thus facilitate international agreement and a gradual reduction of unsustainable pressures on the planet.

1.2. Reorienting International Institutions and Programmes

94. All major international bodies in the United Nations system should be made similarly responsible and held accountable for ensuring that their policies, programmes and budgets encourage and support developments and practices that are sustainable over the short and longer term, especially UNDP, UNCTAD, UNFPA, the Regional Economic Commissions, and the U.N. Specialized Agencies such as FAO, WHO, UNESCO, UNIDO, IAEA and GATT.

95. To this end, in almost every case, governments will need to take the initiative to introduce the Sources Mandate, and this will mean securing the necessary change in their charters and in their budgetary processes. As in the case of national agencies, this will require the redeployment of some positions in most of the bodies mentioned above. To this end, governments (perhaps through the General Assembly?) should direct these bodies to establish a small, high-level centre of expertise, linked to their programme planning and budget processes. Also in the future, the budgets of these agencies should be seen as part of the U.N. system's budget for sustainable development. Instead of shifting a responsibility to UNEP that it cannot carry and was never intended to carry, each agency should be made responsible for ensuring that the environmental and resource aspects of programmes and projects are properly taken into account when they are being planned, and that the financial resources needed are provided directly from its own budget and made an integral part of project funding.

96. If the transition to sustainable development is to become a global vocation, a small centre of leadership is required and should be provided at the highest level of the U.N. It would bring together and provide a global information base, assessing overall environmental,

resource and economic development conditions and trends, and gradually putting in place an integrated system of economic and ecological accounts. It would advise on the implications for sustainable development of certain high-impact macro-economic, trade and sectoral policies of particular interest to the U.N. system. It would oversee that introduction of the Sources Mandate in all U.N. bodies, reporting regularly to the General Assembly on specific steps and progress made by the major United Nations organizations and specialized agencies in adapting their policies, programmes and budgets in support of sustainable development.

97. The United Nations Secretary-General and General Assembly would have to determine how best to create such a centre of leadership and expertise. One possibility exists in the United Nations Office of the Director-General for Development and International Economic Co-operation. It could be given the overall responsibility for ensuring that sustainable development objectives and criteria are applied throughout the United Nations system and be vested with the authority and resources necessary to do so.

98. As sustainable development must become a United Nations system-wide commitment and vocation and will require much closer co-operation among all of the agencies, it would be desirable to constitute a special United Nations Board for Sustainable Development. A principal function of such a Board would be to discuss and agree on combined tasks to be undertaken jointly by the agencies to deal effectively with critical issues of survival and sustainable development that cut across agency and national boundaries. In addition to the executive heads of all major U.N. organizations and agencies, participation in the Board might also include the Chairman of key U.N. intergovernmental bodies.

99. The complex and fragmented budgetary processes in the U.N. system are today a major constraint and even obstacle to effective co-ordination and co-operative action. The ability of the United Nations to lead and support the world in making the necessary transition to sustainable development within and among nations will depend significantly on the extent to which budgets are changed and monitored. That in turn will depend on the extent to which governments can streamline the budgetary allocation and approval processes, and establish their overall and collective authority over the budgets of all organizations and Specialized Agencies in the U.N. system.

2. Dealing with the Symptoms

100. The priority task within and among nations is to get at the real sources of critical environment and development problems through a fundamental reorientation of the key central and sectoral institutions, policies and budgets. That must happen now if we are to begin to break away from the accelerating downward spiral of development-induced environmental degradation undermining the potential for future development

101. However, we must emphasize that the first priority of many today, particularly the people and countries who are the poorest, is to survive the struggle to overcome the already crushing effects of previous mal-development. Those conditions are unlikely to change significantly in the near future. Environmental degradation and human suffering on an increasing frequency and scale are sadly built into future trends and present processes of mal-development. These possess a momentum which will continue until the Sources Mandate and approach begins to achieve results.

102. This means that existing environmental protection and resource management agencies, national and international, need to be strengthened urgently and the resources at their disposal augmented significantly.

2.1 Strengthen National Environmental Protection
and Natural Resources Management Agencies

103. This is needed most urgently in developing countries, and in most cases it will require stronger international support programmes.

104. Developing countries themselves must, of course, take the initiative and provide the political leadership and administrative and legal framework needed for effective environmental protection and resource management. Where this is done, international organizations, including multilateral and bilateral assistance organizations, should stand ready to offer support of two kinds. First, they should offer programmes for institutional development in environmental protection and resource management, similar to those provided earlier in other than priority areas such as energy, agriculture, health and education. Second, they should offer greatly increased financial support in these areas. As proposed later in this Chapter, increased support should also be made available to community groups and non-governmental organizations which are rapidly emerging as important and cost effective partners in securing improvements in environmental protection and resource management at the local and even national levels.

105. By the end of the 1970s, industrialized countries that managed to clean up a major part of the backlog of environmental degradation left by 20 years of unrestricted growth, were spending between one and two per cent of their GDP on environmental pollution control

alone.^{19/} No figures are available for expenditures on managing, protecting and restoring the resource base. The extent of environment and resource degradation in most developing countries is far greater than that experienced in the industrialized countries and, given the trends, many have to build their settlements, roads, transport and energy facilities at a pace, and under conditions of mass poverty, that the industrialized world never had to contemplate. They have to export more and more of their resources to earn the external capital for this. And with present forms of development - in tropical forests, for example, or energy or agriculture - they often end up reducing rather than enhancing their future potential for development.

106. Industrialized countries will also need greatly strengthened institutions to deal with with the continuing backlog of first and the growing range of second generation of environment and resource management problems. In addition to addressing an increasing range of environmental resource issues within their own borders, and advising central and sectoral agencies on the introduction of the Sources Mandate, the environmental protection and resource management agencies of industrialized countries will need to play a larger part in international co-operation. First, they will need to devote more time and resources to supporting the agencies trying to cope with the problems at the regional and global level. Second, they could provide effective institutional support to agencies in developing countries on request.^{20/}

2.2 Strengthen Existing Global Institutions

107. At the international level, concern about the environmental effects of development led as early as 1948 to the establishment of a global non-governmental

organization, the International Union for Conservation of Nature and Natural Resources (IUCN). Following the Stockholm Conference, in 1972 the U.N. General Assembly created the United Nations Environment Programme (UNEP) as the central co-ordinating agency for the U.N. system. One of the principal recommendations of the 1972 Stockholm Conference resulted in the convening of the United Nations Conference on Human Settlements at Vancouver in 1976 which in turn led to the creation in 1977 of the U.N. Centre for Human Settlements (UNCHS), with its headquarters in Nairobi to facilitate close co-operation with UNEP. Each of these organizations needs to be strengthened.

2.2.1 The United Nations Environment Programme

108. The U.N. General Assembly gave UNEP a broad and challenging mandate to stimulate, co-ordinate and provide policy guidance for environmental action throughout the U.N. system. That mandate was to be carried out by a 58 member states Governing Council; a high-level U.N. inter-agency Environment Co-ordination Board (ECB); a relatively small secretariat located in Nairobi; and a voluntary fund set initially at a level of US\$20 million annually.

109. UNEP's primary role was to exercise a catalytic influence on the programmes and projects of other international organizations, primarily in but also outside the U.N. system. In 1976, two-thirds of the Environmental Fund was therefore dedicated to projects carried out by other U.N. agencies and non-governmental organizations. However, by 1985 that proportion had declined by a third. In 1985, 80 per cent of the project expenditures from the Environment Fund was for internal projects either by the UNEP secretariat (26 per cent) or by its Programme Activity Centre (18 per cent). Projects

by four other U.N. agencies (18 per cent, for WHO, FAO, the U.N. Sahelian Office and UNESCO), six non-governmental organizations (9 per cent), and one government (9 per cent, U.S.S.R.) accounted for the balance.

110. Over the last ten years, the Environment Fund has largely levelled off at US\$ 30 million while its range of tasks and activities have increased substantially. In recent years, however, there have been increasing calls to reduce the breadth of UNEP's activities and to concentrate its staff and limited financial resources on fewer priority activities. This has not happened, largely because the member states of the Governing Council have been unable to reach a consensus on what those priority areas of concentration should be.

111. UNEP recently completed an internal evaluation for which it should be commended. This evaluation, however, focused principally on how to strengthen UNEP within its existing mandate rather than addressing the more fundamental questions as to the role UNEP should play in light of the experiences and the changed conditions in the period since the Stockholm Conference in 1972.

112. Several proposals have been made above to strengthen the capacity of the U.N. system to deal with the sources of critical development-based environmental issues. In particular, the Commission has proposed that the responsibility for sustainable development be built into the mandates of programmes and budgets of all key U.N. agencies. The Commission has also proposed, in relation to this, that a central and high level capacity

be designated at U.N. headquarters with the responsibility, authority and resources required to ensure that sustainable development objectives and criteria are applied on a consistent and systematic basis throughout the U.N. system.

113. In line with these new mandates and responsibilities, it is further proposed that these agencies now assume full operational and financial responsibility for the following programmes presently supported by the Environment Fund: WHO on "Environmental Health"; FAO on "Agricultural Chemicals and Residues"; UNDRO on "Natural Disasters"; UNIDO on "Industry and Transport"; ILO on "Working Environment"; UNDA on "Arms Race and the Environment"; DIESA on "Environmental Aspects of Development Planning and Co-operation"; UNESCO on "Education"; and UNDP on "Technical Co-operation"

114. Within this new U.N. system-wide priority commitment and effort on sustainable development, the essential and special roles of UNEP would be:

- * as the authoritative central source in the U.N. system for environmental monitoring, assessment and reporting;
- * as an advocate and agent for change concerning critical environmental and natural resource protection issues.

115. The major priorities and principal functions of UNEP would be:

- * to provide leadership, advice and guidance in the U.N. system on critical environmental problems; including support to other U.N. bodies on the introduction of the Sources Mandate;

- * to monitor, assess and report regularly on changes in the state of the environment and natural resources (Earthwatch);
- * to establish and co-ordinate priority scientific and technological research in respect of critical environmental and natural resource protection issues;
- * to develop and facilitate action plans to be implemented and financed by the governments directly concerned;
- * to support and facilitate the development of international law, conventions and co-operative arrangements for environmental and natural resource protection;
- * to provide advice and assistance on request to the United Nations Development Programme and other U.N. organizations and agencies in respect of the environmental dimensions of their technical assistance and training activities;

UNEP's Monitoring, Assessment and Reporting Functions

116. While more is known about the state of the global environment now than a decade ago, there are still major gaps and a limited international capability for monitoring, collecting and combining basic and comparable data needed for authoritative overviews of key environmental issues and trends. Without such a capability and overview, the information needed to set priorities and develop effective policies to protect and restore the environmental resource base for development will remain limited. UNEP can and should be the authoritative central source in the U.N. system for

environmental resource monitoring and data assessment and reporting, and for setting the global agenda for scientific research and technological development on environmental resource protection.

117. It is therefore recommended that the monitoring, assessment and state of the environment reporting functions (Earthwatch) of UNEP should be significantly strengthened and accelerated, and should have priority over all other activities in the allocation of staff and financial resources now and through at least the 1990-95 Medium-Term Plan.

- * The Global Environment Monitoring Systems (GEMS) should be expanded as rapidly as possible.
- * The development of the Global Resource Information Data Base (GRID) should also be accelerated to bridge the gap between assessment and management by focusing data on specific environmental management problems in specific geographical areas.
- * An authoritative and comprehensive report on the State of the World's Environment should be prepared and published under the authority of the UNEP Executive Director every fourth year. In each of the three intervening years, there should be special annual reports, each focused on a single critical environmental issue. The entire annual report or most relevant sections should be submitted to and discussed by the governing bodies of the respective U.N. organizations and agencies.

Focus on Environmental Protection Issues

118. UNEP has from the beginning been a key agent in focusing the attention of governments on critical environmental problems (e.g. desertification, deforestation, soil degradation, marine pollution). UNEP has played a significant role in helping to develop many global and regional action plans and strategies (e.g. marine mammals, desertification); in contributing to the negotiations and implementation international conventions (e.g. Migratory Species Convention, Protection of the Ozone Layer); and in preparing global guidelines and principles for action by governments (e.g. marine pollution from land-based sources). The UNEP Regional Seas Programme has been particularly successful, and could serve as a model for some other areas of special concern, especially international river basins.

119. UNEP's intrapreneurial role in the U.N. system of identifying critical environmental issues and developing self-financing international agreements and action plans for them, can and should be reinforced and extended. UNEP's intrapreneurial role should extend to taking the lead in identifying the need for, designing and helping other organizations and agencies of the U.N. to establish and carry out technical assistance and environmental management training courses.

120. In its future work on critical environmental protection issues, UNEP should focus particularly on:

- * developing, testing and helping to apply guidelines for protection of the environmental resources;

- * extending existing and proposed international agreements reached at the regional level (e.g. on chemicals and hazardous wastes), and to accelerate or launch negotiations on new international conventions, protocols and agreements;
- * extending the Regional Seas Programme and agreements for intergovernmental co-operation on monitoring and assessment into self-financing action plans for protection, restoration and improvement;
- * developing a similar programme for getting international agreements and self-financing action plans for the environmentally sound management of international river basins;

Co-ordination and Co-operation

121. As the lead agency for co-operation and concerted action in the U.N. system in respect of environmental resources protection activities, UNEP's role should be strengthened and reinforced through:

- * establishment of an inter-agency Environmental Co-ordinating Committee, or Board, consisting of high-level officials of relevant U.N. organizations and chaired by the Executive Director of UNEP for the purpose of reviewing the environmental resource protection activities throughout the U.N. system and, through a direct link with the new inter-agency mechanism established at U.N. headquarters for sustainable development, to ensure that the environmental resource protection activities of the U.N. system are compatible with and supportive of its sustainable development objectives and activities;

- * establishment of a limited number of standing and/or ad hoc working groups on particular subjects involving the interests or activities of several organizations or agencies within the U.N. system (e.g. global monitoring and assessment through GEMS, GRID);
- * special ad hoc consultations and meetings as necessary on critical issues which cross agency boundaries and require concerted action (e.g. control of toxic chemicals).

Intergovernmental Agenda and Participation

122. The agenda and level of participation at UNEP Governing Council sessions is not adequate either to ensure the degree and quality of policy level review and support for UNEP's current programmes and responsibilities. Governing Council sessions and documentation for them in recent times have focused too much on administrative and budgetary questions, including the Environment Fund, and too little on the larger issues of regional and global environmental protection policy and management. One consequence of this, which may also be a cause of it, is that since the late 1970s (with the exception of the 10th Anniversary Session in 1982) only around 20 per cent of the approximately 350 delegates have been Ministers or senior policy advisers in national departments directly responsible for environment and natural resources.

123. One of the main thrusts of this report is that the environmental resource base of development can be sustained only through a fundamental shift in the responsibilities of the key central and sectoral agencies. They must themselves become directly responsible and accountable for ensuring that their policies, programmes and projects are both economically

and ecologically sustainable. As they introduce their new mandates, these agencies will require advice on the environmental dimensions of the issues and the best source of this advice may often be the environment and natural resource protection agencies.

124. With the introduction of the Sources Mandate at the international level, the governing bodies of the key U.N. organizations must be more closely associated and linked with each other. Under the present U.N. structure, this could be most appropriately done through ECOSOC, although that body has not yet manifested the capacity to carry out its responsibilities with a sufficient degree of effectiveness. If U.N. member states were to commit themselves to the kind of changes in the functioning of ECOSOC required to enable it to carry out its functions effectively, ECOSOC could provide the forum within which the programmes and activities of the U.N. system related to sustainable development could be co-ordinated. This might be achieved, for example, by having ECOSOC meet in special session on key interrelated environment and development issues, with high level participation from both governments and the major U.N. organizations and agencies. Alternatively, UNDP's Governing Council and the governing bodies of the other organizations which are subordinate bodies of the United Nations, including UNEP's Governing Council, could be reconstituted as committees of ECOSOC. This might be particularly effective given the degree to which the Sources Mandate requires that the environmental resource dimension be integrated into the policies, programmes and budgets of other organizations and agencies if they are to be effective.

125. It is recommended that governments should, either through meetings of the UNEP Governing Council or of ECOSOC in special session (or as a special committee of ECOSOC) or both:

- * meet every two years at the level of Ministers with their senior policy and scientific advisors;
- * change the emphasis of the current agenda on administrative, budgetary and inter-agency matters to an agenda focused on:
 - ** the implications of "Earthwatch" and other major reports on critical environment issues for current national and international policies and programme priorities;
 - ** the implementation of existing and development of new action plans and international agreements on critical environmental resource issues, particularly as they bear on sustainable development.
- * examine at each meeting the environmental aspects and implications of one or two key policy areas (e.g. agriculture, trade, health, forestry, human settlements) with the discussion of each such issue led by the executive head of the relevant United Nations organization or agency;
- * assign primary responsibility for administrative and budgetary questions at and between meetings to its Bureau or an expanded Bureau/Executive Committee and/or a representative Committee of Nairobi-based Permanent Representatives/UNEP Focal Points;

- * encourage and make special provisions for the meaningful participation of major scientific and environmental NGOs (and change the rules of procedure accordingly).

Environment Fund

126. The voluntary funding base for UNEP is too limited and vulnerable for an international fund dedicated to serving and protecting the common interests, security and future of mankind. Six countries alone provided over 75 per cent of the 1985 contributions to the Environment Fund (USA, Japan, U.S.S.R., Sweden, FRG, U.K.). Over half of the U.N. members did not contribute at all.

127. This may in part be because the Environment Fund has supported a too wide spectrum of activities and projects related to the large number of areas of interest which governments have placed on UNEP's agenda and the lack of clear guidance as to priorities amongst them. It may also be because of the understandable desire to give environment an expression in the budget of the United Nations. The unintended result, however, has been to make environment a sector in its own right. Environment is not a sector, of course, and when treated that way, it can become a competitor for funds with other agencies. When that happens, these agencies can and often do take the position that if the environmental dimension is to be built into a project, "add-on" funds should be sought from the separate environment fund.

128. In any event, as a result of defining environment as a sector, and giving it expression in the Environment Fund, UNEP has had to try to do too much with too little. It has supported projects and activities, including technical assistance and training, in

development-related areas which run parallel, and sometime compete with those funded by UNDP and other U.N. organizations and agencies. This has inevitably reduced its impact, including in those areas in which it does have a central role, such as Earthwatch.

129. In the current climate of financial austerity, it seems unlikely that a substantial enlargement of the Environment Fund is a realistic possibility. To the extent that additional funding is made available by states for U.N. development programmes and activities, these fund could, and with the introduction of the Sources Mandate should, appropriately to be channelled largely through the UNDP and the development programmes of other U.N. organizations and agencies. If UNEP is to exert the effective leadership required of it in the future, therefore, and have the necessary impact in the specific areas identified earlier, it should concentrate the resources of the Environment Fund in those areas, and in particular on Earthwatch. In doing so, UNEP would have a better chance of attracting additional funds in the future.

130. It is therefore recommended that:

- * The Environment Fund be utilized to support the exercise of the principal functions and major priorities described above, in particular Earthwatch, and not, for example, for technical assistance and training activities which should be carried out by or through the United Nations Development Programme and other U.N. organizations and agencies.
- * The Environment Fund should be used on a "best value for money" basis in securing and supporting co-operation with the most relevant and effective organizations within and outside the United Nations assistance.

- * Governments agree to put in place new and more assured sources of funding as proposed in the later section on "Investing in Our Future".

2.2.2 The International Union for Conservation of Nature and Natural Resources

131. Founded in 1948, the I.U.C.N. is the global federation devoted to the protection and sustainable use of earth's living natural resources.

132. Uniquely, it brings together the skills, concerns and interests of resource managers, scientists, lawyers and other professional,s and committed citizens from all parts of the world to focus upon the challenge of protecting and maintaining the planet's living resources. It provides a mechanism for dialogue among intergovernmental, governmental and non-governmental groups, and it bridges the perspectives of north, south, east and west.

133. IUCN's membership constituency is composed of states, governmental agencies, universities, research institutes, citizens' organizations and other private organizations. Currently, IUCN has 58 state members, 125 government agency members and 333 non-governmental organization members in some 125 countries throughout the world. The Union is a non-political body, governed democratically by its General Assembly, representing members from a broad range of natural regions, cultures and perspectives. In addition, the United Nations organizations, regional inter-governmental institutions, development agencies and the World Wildlife Fund work closely with IUCN on a partnership basis.

134. IUCN is managed by a small secretariat located in Switzerland with data centres in the Federal Republic of Germany and the United Kingdom, and field offices in Costa Rica, Zimbabwe, Senegal, and Kenya. To enable IUCN to be effective in promoting conservation action on the ground, it maintains a global network of volunteer experts in the areas of ecology, environmental education, environmental planning, environmental law, protected areas and species conservation. These currently number over 3,000 individuals throughout the world.

135. Over the years, IUCN has achieved considerable success in various sectors of nature conservation. Action on endangered species, the planning, design and management of protected areas, the drafting and promotion of conservation law, the monitoring of species, protected areas and trade in endangered species and conservation law and policies are among its major achievements.

136. Governments have entrusted IUCN with secretariat duties under the Ramsar Wetlands Convention, it is the technical advisor for natural sites under the World Heritage Convention, it serves in an advisory capacity to UNEP for both the Endangered Species and Migratory Species Conventions, and it participates actively as an international organization observer in conventions as diverse as CCAMLR, IWC, the European Convention, and the International Tropical Timber Agreement.

137. IUCN has been granted special status by the U.N. family, and it enjoys consultative status with the United Nations (ECOSOC). The Union works closely with the United National agencies and participates regularly in meetings sponsored by the United Nations. Most important, IUCN is a full member, along with UNEP, FAO and UNESCO, of the Ecosystems Conservation Group (ECG). This group was established in 1975 to provide the forum

for joint international programming among concerned U.N. bodies and IUCN in the field of nature conservation. The ECG partners co-operate on a variety of conservation matters. Most notably, they have sponsored, together with WWF, the World Conservation Strategy produced in 1980 by IUCN. Recent endeavours include the elaboration of national conservation strategies, co-operative efforts for wetland and tropical forest conservation, the preparation of a programme for conservation in the Sahel, and support for education and training of conservation personnel.

138. A. Given the growing demands for effective resource management, protection, restoration and monitoring, the capacity of IUCN to work at the national and international level must be greatly expanded. Nationally, IUCN is uniquely qualified to provide advice and assistance to developing countries in establishing and implementing national conservation strategies. Internationally, it can and should play a leading role in the development of global and regional action plans and agreements for the conservation of species and ecosystems of international significance (with tropical forests as the initial priority). The World Conservation Bank mentioned below could be a useful instrument in this regard. Governments, foundations, and international agencies should confer urgently and agree upon a plan to broaden IUCN's base of financial support.

2.2.3 The United Nations Habitat and Human Settlements Programme (UNCHS)

139. The U.N. General Assembly established the UNCHS in 1978 to serve two principal purposes: to provide technical advice and assistance to governments for

improving human settlements policies, management and conditions, and to initiate, co-ordinate and provide policy guidance for human settlements activities in the U.N. system.

140. In order to carry out this mandate a 58 member states U.N. Commission on Human Settlements was created, along with a special UNCHS/UNEP Joint Bureau, to ensure close co-operation between the two governing bodies and secretariats. A small UNCHS Secretariat was located in Nairobi, and special joint staffing arrangements were made with the U.N. Regional Economic Commissions in developing regions. And the U.N. Habitat and Human Settlements Foundation established after the 1972 Stockholm Conference was transferred to the UNCHS. This remains the basic UNCHS structure, except for the UNCHS/UNEP Joint Bureau which, at the initiative of the UNEP Governing Council, was abolished in 1985. In 1982, however, the UNCHS was also designated by the General Assembly as the lead agency for the U.N. system for the International Year of Shelter for the Homeless (IYSH) in 1987.

141. The UNCHS programme priorities are to:

- * improve national settlements policies and planning;
- * upgrade shelter and community services;
- * develop the indigenous construction sector;
- * build low cost infrastructure;
- * get security of land tenure for the poor;
- * mobilize housing finance for low income groups; and
- * strengthen urban management institutions and training.

142. In 1985, the UNCHS executed nearly 150 field projects in 80 countries with a value of over US \$15 million, with funds provided largely by UNDP. In addition the UNCHS received US \$5million from the U.N.

regular budget and US \$3 million in voluntary contributions. The UNCHS has a total of 80 professional staff.

143. The earlier Chapter on human settlements sets out forcefully the harsh realities of the current and escalating urban crisis in developing countries. The fast widening gap between urbanization and urban growth and the capacity for managing third world cities is everyday apparent to those who live there. There is a legacy and momentum built into urbanization trends in most developing countries that ensures that urban problems will get worse before they get better. These trends and problems are largely ignored in decision making on macro-economic and major sectoral policies which have a decisive influence on them. The poor majority, and the local governments intended to represent and serve them, have little or no influence on the allocation of political power or public funds, or in the policy and decision making processes that presently limit and even undermine their lives and prospects.

144. A successful transition to sustainable development means reversing the current trends of accelerating urban concentration and urban decline in developing countries. Chapter 8 includes a number of recommendations designed both to get at the real policy sources of the trends and to tackle the accumulating backlog of effects. Of primary importance is the need to re-examine and reorient the central economic and major sectoral policies which now induce and reinforce mega-city growth, urban decline and poverty. As proposed in Chapter 8, this will require adoption of much broader concept of urban and habitat policy than has yet been reflected in most national

institutional frameworks. Given the momentum built into the trends, there is also an urgent need to strengthen the political powers, institutions, financial resources and expertise of local governments.

145. The transition to sustainable development and constructive urban growth should also be reflected in expanded international programmes of co-operation among developing countries and of bilateral and multilateral aid. There is a particularly urgent need to rapidly increase urban management training programmes and new urban management institutes, particularly at the sub-regional level.

146. The capacity of the United Nations to advise and assist developing countries in implementing these priorities also needs to be strengthened. This will require new efforts by and better co-ordination among many of the major U.N. organizations and Specialized Agencies, with regard to the UNCHS, this could be achieved by:

- * increasing support for the UNCHS programme;
- * launching a special and joint UNCHS/UNEP programme on reducing the environmental impacts in and of human settlements, or
- * merging the UNCHS and UNEP in a new U.N. Environment and Human Settlements Programme.

3. Ensuring Survival

147. In addition to strengthening the capacity of the United Nations system as a whole to support sustainable development, the Commission is convinced that there is a need for a special capacity to assess and report on critical threats to survival during the transition to sustainable development. This would involve establishment of a new and independent body linked to governments, the United Nations system and other intergovernmental bodies, before which NGOs and others would have standing, and through which information and independently peer-reviewed analysis and assessments would be brought formally to the attention of governments, intergovernmental bodies and public opinion.

148. Many compelling reasons have been put forward throughout this report as to why such a body is needed now, including, for example:

- * The growing frequency and scale of crisis stemming from unsustainable pressures on the environmental and resource base for development.
- * The growing number of cases where the threshold of natural systems risks to be crossed, with potentially catastrophic consequences for development and survival.
- * The lack of capacity in intergovernmental bodies for independent and frank assessments of the cumulative impacts of national policies and development practices on other states, regions and the international commons.
- * The political and structural constraints which inhibit intergovernmental bodies in undertaking and publishing critical information, data and independent assessments.

- * The fact that in spite of the growing number, role and impact of multinational enterprises and NGOs, they remain largely excluded from decisions about what goes on the agenda and in the programmes of intergovernmental organizations.
- * The need to expand fact-finding and informed opinion gathering through international public hearings on critical issues of survival and sustainable development.
- * The need for an authoritative body which can sound an early and loud warning of impending crisis and threats to survival.

149. It is therefore recommended that the United Nations General Assembly endorse and help secure the establishment of a World Survival Commission^{21/} as an authoritative and independent voice and source of advice and guidance during the transition to sustainable development. The principal functions of the World Survival Commission should include:

- * to identify and assess all environment and development issues bearing on the survival, security or well-being of all or a majority of peoples globally or regionally;
- * to anticipate special threats, identify their sources in policies or development activities and propose options for change to prevent or reduce them or, if necessary, how best to adapt to them;
- * to receive from governments, international organizations, national and international scientific bodies and NGOs, all data and information on issues with which it is dealing and call their attention to additional monitoring and information needs;

- * to prepare and submit regular and special reports on critical issues, with recommendations for action, to governments, intergovernmental organizations, the United Nations General Assembly and, for special cases endangering inter-state peace and security, to the United Nations Security Council.

150. Membership of the World Survival Commission should consist of a limited number of eminent individuals who together would reflect a broad cross-section of the major disciplines, vocations and regions around the world. The Chairman and Members could be elected in various ways. Initially, for example, they could be selected by a specially constituted nominating committee chaired by the United Nations Secretary-General and consisting of leading but independent persons (including, for example, leaders nominated by ICSU and IUCN).

151. The methods of work of the World Survival Commission should include special enquiries and public hearings at which all governments, institutes and NGOs would have the right to bring issues to the attention of the Commission and to intervene in its public hearings. The World Survival Commission should also have the capacity to appoint special expert and advisory groups consisting of world-known scientific, economic and legal authorities.

152. As an independent body, the funding of the World Survival Commission would need to be provided through voluntary contributions by states, foundations and other private sources and/or through one or more of the new international revenue sources proposed a later in this Chapter.

4. Reconciling Rights and Responsibilities

153. National and international law has traditionally and too often lagged behind events. Moreover, legal regimes are today being rapidly out-distanced by the accelerating pace and expanding scale of man's impacts on ecosystems, and on the environmental basis for further local and even global economic development and survival.

154. The fast widening gap between the slowly evolving laws of man and the unchanging and universal laws of nature must be confronted and closed. Sustainable development cannot be achieved if it is not. As an essential part of ensuring survival and making a successful transition to sustainable development within and among nations, there is now an urgent need:

- * to recognize and respect the basic rights and responsibilities of individuals and states which are essential for a successful transition to sustainable development;
- * to establish and apply new norms for state and inter-state behaviour regarding not only transboundary resources and pollution, but also the individual and collective responsibilities of states concerning future generations, other species and ecosystems of international significance, and the global commons;
- * to strengthen and extend the application of existing laws and international agreements which promote and support sustainable development;
- * to reinforce existing and develop new methods and procedures for avoiding and resolving disputes, including binding settlements in order to encourage early agreement and avoid prolonged disputes and damage.

4.1 Establish the Basic Rights and Responsibilities
of Individuals and States for Sustainable Development

155. A basic purpose and obligation of government in any state is to ensure the security and well-being of its citizens. This is usually represented in the constitution or basic laws by a set of fundamental rights, including the right to life, liberty and security of person as well as to a standard of living adequate for health and well-being.

156. An important pre-requisite for the full enjoyment of these fundamental rights was recognized and adopted by the 1972 United Nations Conference on the Human Environment in Stockholm. Principle 1 of the Stockholm Conference Declaration states that "Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being". Principle 1 further proclaims the solemn responsibility to protect and improve the environment for both present and future generations.

157. After the Stockholm Conference several states such as the U.S.S.R. (1977), Spain (1978) and Peru (1979) formally recognized in their Constitutions or basic laws the right to an adequate environment as well as the obligation of the state to protect the environment . However, so few other states have done so that there is not yet any recognized general principle of national law embodying such rights and obligations.

158. Recognition of the fundamental right of present as well as future generations to an environment adequate for their health and well-being is an important first step towards sustainable development. Progress in securing that right and the objective of sustainable development will entail recognition of other essential rights such as:

- * the right to know and have access to current information on the state of the environment and natural resources, especially on pollutants, products and situations which pose immediate or longer term threats to human health;;
- * the right to be consulted and to participate in decision-making concerning activities likely to have a significant effect on health, property, resources and the environment;
- * the right to legal remedies by individuals and groups whose health, safety or use of the environment or natural resources has been or may be significantly affected by on-going or proposed activities, including the right of access to, and due process and treatment in, administrative and judicial proceedings;
- * the right to compensation for those whose health or use of the environment and natural resources have been substantially and adversely affected.

159. The enjoyment of any right requires respect for the similar rights of others, and recognition of reciprocal and even joint responsibilities. To achieve sustainable development, the responsibilities of individuals and especially of states should also include the obligations:

- * to maintain ecosystems and related ecological processes essential for the functioning of the biosphere in all its diversity, in particular those important for human health, food and energy production and other aspects of human survival and sustainable development;

- * to maintain biological diversity by ensuring the survival and promoting the conservation in their natural habitat of all species of flora and fauna, in particular those which are rare, endemic or endangered;
- * to observe the principle of optimum sustainable yield in the exploitation of living natural resources and ecosystems;
- * to prevent or abate significant environmental pollution or harm;
- * to establish adequate environmental protection standards, including environmental quality standards, emission standards, technological standards and product standards aimed at preventing or abating interferences with natural resources or the environment;
- * to undertake or require prior assessments of the sustainability of a policy, project, process or product that may significantly affect, health, safety, resources or the environment;
- * to make all relevant information public without delay whenever public authorities have been notified of any harmful or potentially harmful releases of pollutants, especially radioactive releases, particularly in emergency situations.

160. As an essential part of making the transition to sustainable development, it is recommended that governments take appropriate steps to incorporate such rights and obligations in national and international legal frameworks. At the national level there is such a wide variation in legal systems and practices that it is

not possible to propose a single approach that would be valid for all countries. However, a few examples of different approaches include:

- * amend the basic laws or Constitution, as already done by several countries;
- * adopt a special and distinct national law or Charter setting out the rights and responsibilities of citizens and the state regarding environmental protection and sustainable development;
- * designate a specific Minister or appoint a special national Council or public representative or "ombudsman" to represent the environmental interests and rights of present and future generations, and to act as a watchdog for alerting governments and citizens to any emerging threats to the ecological basis of sustainable development.

4.2. A Universal Declaration and a Convention on Environmental Protection and Sustainable Development

161. One of the first major achievements of the United Nations was the adoption by the General Assembly in 1948 of the Universal Declaration of Human Rights. The Assembly proclaimed the Declaration as "a common standard of achievement for all peoples and all nations" and called upon them to promote and secure the effective recognition and observance of the rights and freedoms in it. Those rights were later consolidated and extended in several binding international Covenants. Under the International Covenant on Civil and Political Rights, a special Committee of independent experts was established to consider reports by states parties on measures taken to implement the Covenant, and also to consider communications alleging violations by states parties to a supplementary Protocol of the Covenant.

162. A similar approach is proposed for launching and making the transition towards sustainable development by the end of this century.

163. At its meeting in Tokyo in February 1987 the Commission adopted and issued a Declaration on Environmental Protection and Sustainable Development. It recommends that this or a similar Declaration based on it be adopted and proclaimed by the United Nations General Assembly at its session in late 1987. It is further recommended that at the same session the General Assembly establish a special negotiating group to prepare a binding Convention on the rights and responsibilities of states regarding environmental protection and sustainable development.

164. The proposed Convention should include effective measures for protecting those rights and fulfilling the obligations. Such measures could include, for example, the establishment of a group of independent experts, similar to that for human rights, which would consider reports on progress and alleged violations from governments, United Nations and other international organizations and NGOs, and issue periodic public reports and assessments on progress made and needed to implement the Convention. To complement or as an alternative to such a group, a special and senior representative or "ombudsman" might be appointed to receive and assess communications from individuals and non-governmental groups concerning compliance with or violations of the Convention, and to represent and protect in particular the rights and interests of future generations.

165. Recognizing both the difficulty of the task and the need for the accelerated development of such a new legal basis for sustainable development, it is proposed that

the special negotiating group should aim at having an agreed Convention text ready for signature by states during and preferably before 1990, so that it may be ratified and begin to influence the behaviour of states before the turn of the century. To help launch that process quickly, and as a starting point for negotiations, the Commission recommends the draft Convention text proposed by its group of international legal experts. A summary of the main thrusts of the 22 Articles in that draft text is annexed to this report.

4.3. Strengthen and Extend Existing International Conventions and Agreements

166. While negotiations proceed on the preparation of a more comprehensive approach and Convention for Environmental Protection and Sustainable Development, governments should also accelerate their efforts to strengthen and extend existing and more specific international Conventions, agreements and co-operative agreement by:

- * acceding to or ratifying existing global and regional Conventions dealing with environment and development, and applying them with more vigour and rigour;
- * reviewing and revising those existing Conventions which need to be brought in line with the latest available technical and scientific information;
- * negotiating new global and regional Conventions or arrangements aimed at promoting co-operation and co-ordination in the field of environment and development (including, for example, new conventions and agreements on hazardous chemicals and wastes, on preserving biological diversity, and on high risk technologies).

167. Regarding hazardous chemicals and wastes entering international trade, a major and new principle which should be applied is that of "Prior Informed Consent" (the PIC Principle). Under this principle the exporting country would permit export of a hazardous chemical or waste only after information had been provided to the importing country on any exporting country restrictions on domestic use and the reasons for them; and, after receiving that information, the importing country had consented to proceed.

168. A chronic problem for many international Conventions and agreements is that after agreement is reached and the text is signed by states, there is often a long delay before enough states have ratified it to actually bring it into force. A major constraint and reason for this is that the responsible organization is usually an intergovernmental secretariat which lacks the right and authority to push states to ratify the Convention quickly. With the rapidly increasing pace and scale of environmental impacts on human health and economic development, the world can no longer afford such delays. It is therefore recommended that intergovernmental secretariats be specifically given the responsibility and authority to urge and even assist some states in ratifying relevant Conventions quickly. As an alternative, concerned governments and foundations should consider providing special support to NGOs for doing so. The existing modalities for bringing conventions into force should also be thoroughly re-examined with a view to streamlining them.

4.4 Avoiding and Settling Disputes on Development-Based Environmental Resource Management Issues

169. Many disputes can be avoided or more readily resolved if all or most of the principles, rights and responsibilities cited earlier are built into the national and international legal frameworks and are fully respected and implemented by a large number of states. In addition, individuals and states are more reluctant to act in a way that might lead to a dispute when, as in many national legal systems, there is an established and effective capacity as well as an ultimately binding procedure for settling disputes. Both attributes are lacking at the international level, particularly on environmental and natural resource management issues.

170. It is recommended that public and private organizations and NGOs strengthen and expand the capacity to avoid and resolve such disputes, national and international governmental and private organizations should:

- * maintain panels or rosters of experts with experience in various forms of dispute settlement and special competence on the legal and substantive aspects of environmental protection, natural resources management and sustainable development;
- * establish through existing institutions a consolidated inventory and referral system or network for responding to requests for advice and assistance in avoiding or resolving such disputes.

171. Further measures are also needed to promote the peaceful and early settlement of international disputes on development-based environmental resource management

issues, as well as to provide an incentive to avoid prolonged disputes. It is recommended that for such issues a new tenet of international law be put in place to the effect that, if mutual agreement on a solution or on other dispute settlement arrangements is not reached among the concerned states within a period of 18 months, the dispute shall then be submitted to conciliation at the request of any one of the concerned states and, if still unresolved, thereafter to arbitration or judicial settlement.

172. As a complementary measure, the capacity of the Permanent Court of Arbitration and the International Court of Justice should be strengthened:

- * regarding the Permanent Court of Arbitration, those states with the right to select four members of the Court should give special consideration to ensuring that at least one of the four members has special experience and competence on questions of environmental protection and natural resources management.
- * regarding the International Court of Justice, states should consider making more use of the Court's capacity (under Article 26 of the ICJ Statute) to form special chambers for dealing with particular cases or categories of cases, including environmental protection or resources management cases, and of the Court's recently emphasized readiness to deal with such cases fully and promptly.

5. Managing the Commons

173. Strengthen and Extend the Capacity to Manage the
International Commons

NOTE

It was agreed at the Harare meeting that "Managing the Commons" would need a new and separate chapter (see draft Chapter 10). The contents of this section will be based on draft Chapter 10 as revised by the Commission at the Moscow meeting.

6. Taking Effective Regional Action

174. Several clear and related lessons have emerged from the experience to date with international development-based environmental and resource use problems.

- * Many can be avoided or resolved only through international co-operative arrangements, and the sooner such arrangements are put in place the better. Neglect or delays can foreclose mutually beneficial options or exacerbate linked environmental and economic decline.
- * Many can be dealt with best through co-operative arrangements designed by and for those states directly concerned, especially problems of an exclusively regional or sub-regional character.
- * Many problems which are handled inadequately or neglected at regional and sub-regional levels will eventually have wider and even global impacts on natural and economic systems.

6.1 Strengthen Existing Regional Organizations

175. The Sources Mandate for sustainable development and the Symptoms Mandate for environmental protection both need to be strengthened and implemented in all of the existing regional intergovernmental organizations. It is therefore recommended that governments:

- * build sustainable development objectives and criteria into the overall mandates and programmes of all regional intergovernmental organizations within and outside the United Nations system;

- * increase the role and resources of the intergovernmental committees and staff units dealing with environmental protection and natural resource management issues in the those regional organizations, or establish such a capacity where they do not exist.

6.2 Establish New Regional and Sub-Regional Organizations

176. Special regional and sub-regional intergovernmental bodies for economic co-operation and sustainable development are needed, especially among developing countries, to deal with interrelated economic, energy, environment and development problems, and to manage the transition to sustainable development in a co-ordinated and cost-effective way.

177. Though necessary in our view, this will not be easy as it has now become common place for government spokesmen to assert that there is no need for any new agencies, especially international agencies. Among certain circles, especially in some advance industrialized countries, this instant reaction to any and all suggestions for new institutional initiatives suggests that it is now programmed deep in the culture of decision-making bodies.

178. To a degree, it is understandable that this should be a dominant view in some industrialized countries. At the bilateral and regional level, they are a institutionally rich, enjoying a comparatively well developed structure for international action. This includes a wide range of specialized bilateral organizations such as the Canada/USA International Joint Commission in North America, which on reference may deal with any problem concerning shared resources; and various sub-regional multilateral agencies in Europe, such as the Rhine River, Danube or Baltic Sea Commissions.

179. It also includes several large and long-established regional multilateral organizations such as the CMEA, OECD and the U.N./ECE; and even a supra-national organization, the Commission of the European Community (CEE). Programmes for international co-operation on environmental protection and natural resources management are long standing and prominent feature of all of these organizations. Within these organizations, indeed governments can take up virtually any problem of common interest, obtain advice on how to advance their common interest, concert policy action, and even negotiate legally-binding decisions and treaties. Some of the more complex and politically sensitive problems of environment and international trade, for example, are being tackled through the OECD, where member governments are rapidly evolving an international regime within which the international trade in chemicals can be controlled through national action without jeopardizing the competitive position of any country. A number of OECD countries are also evolving legislation, national agencies and an international regime to control the transboundary movements of hazardous wastes.

180. The extensive regional and sub-regional institutional arrangements among developed countries now need to be changed to reflect the Sources Mandate and to enable the integration of environment into economic, trade, energy and other sectoral policies. They do, however, provide the developed countries with a strong foundation on which to build, individually and collectively.

181. This is not true, unfortunately, for developing countries in the other regions. At the bilateral and regional level, they remain institutionally poor. None

can call upon a standing and flexible agency such as the International Joint Commission to help resolve transboundary problems or explore joint development opportunities. Few have negotiated treaties to cover the joint planning and management of shared water and other resources. Deforestation is a present threat to the development prospects of many regions, but none has a treaty embracing it. Desertification threatens the resource base for development in large parts of Africa and Asia, but no agreements have been arrived at within which joint counter measures can be taken. Acid rain is an evolving threat to parts of Asia, South America and Africa, but nowhere has consideration of a preventive convention even begun.

182. For developed countries to argue that no new agencies are needed is both unfair and short-sighted. Instead, they should support and assist developing countries to establish effective bilateral and regional organizations to:

- * develop regionally comparable economic and environmental statistics, baseline quantity and quality surveys of shared resources, and an early warning capability to reduce and/or prevent an increasing range of environment and development hazards;
- * identify and seize opportunities for regional co-operation in financing, developing and exploiting new technologies for environmental regeneration;
- * convene high-level meetings on critical common problems at the Ministerial and senior policy advisors' level aimed at reaching agreement on joint or co-ordinated action;

- * develop contingency plans and the capacity to respond quickly to existing or emerging critical situations and issues;
- * make recommendations, decisions and commitments binding on all members;
- * develop and apply in concert basic common principles and guidelines concerning environmental protection and resource use, particularly with respect to foreign trade and investment.

6.3 Focus on Ecological Systems

183. There is also a need for a new focus and priority on the sustainable use and management of ecological systems and sub-systems. The IUCN has identified over 200 distinct bio-geographic zones in the world. Most of them transcend the boundaries of two or more states. Their essential ecological functions and economic uses can best and often only be maintained and effectively managed through international co-operation.

184. International river basins provide an even more graphic example. There are at least 200 major international river basins in the world. Most non-island countries in the world share at least one international river basin. Nearly one of every four of these countries are situated entirely in an international river basin. Nevertheless, only 63 per cent of the 200 river basins are covered by an international agreement, and only 27 have co-operative institutional arrangements. In both cases, the gap is particularly acute in Africa, Asia and South America which together have 144 international river basins.

185. It is therefore recommended that governments through UNEP and IUCN support and accelerate the development of sub-regional co-operative agreements and arrangements for the protection and sustained use of ecological units, especially in Africa, Asia and South America. Co-operative arrangements should include joint commission or expert committees among contiguous countries to assess and agree on joint measures for the equitable and sustainable use of transboundary natural resources and migratory species, and for the assessment and reduction or avoidance of transboundary environmental problems (e.g. desertification, transboundary air and water pollution).

7. Making Informed Choices

7.1 Non-Governmental Organizations (NGOs)

186. Community groups and NGOs are increasingly effective agents of change and improvement at the local level, as essential partners in implementing development projects, and in mobilizing funds for disaster relief and development projects around the world (e.g. Oxfam; Red Cross; Live Aid; an estimated US\$2.4 billion were raised in 1983 by NGOs in OECD countries). On environment and natural resource management issues, major national "State of the Environment" reports are now being done by some NGOs (e.g. Malaysia, India).

187. A number of NGOs have emerged which are increasingly effective at the international level, including some who are producing major global reports on the status of and prospects for the global environment

and on the use, enhancement, degradation and depletion of the world's natural resource base (e.g. the annual "State of the World Report" by the Worldwatch Institute; the "World Resources Report" by IIED and the World Resources Institute; the IUCN World Conservation Strategy).

188. Many new international coalitions and networks of private voluntary NGOs are now in place and active. These include regional groups such as the European Environment Bureau (EEB); the Asia-Pacific People's Environment Networks (APPEN); the African Network of Environment NGOs (ANEN); global coalitions on critical issues such as the Pesticide Action Network (PAN); the Working Group on Development Assistance; the Seeds Action Network; a global network for information exchange and joint action through the Environment Liaison Centre (ELC), which has over 230 NGO groups as members, with the majority from developing countries, and is in contact with 7,000 others.

189. Campaigns in support of environmental protection and sustainable development by local community groups, national and international NGOs, and in the world media have been increasingly effective in recent years (e.g. the Chipko movement in India; the consumer movement in Malaysia; the successful campaign by Greenpeace and other NGOs for a moratorium on commercial whaling).

190. In making and implementing informed choices during the necessary transition to sustainable development at the national level, it is essential to have the support and co-operation of most citizens, community groups and other NGOs. It is therefore recommended that governments facilitate the participation and help expand the role and effectiveness of NGOs by, for example:

* incorporating or strengthening the following rights in the national legal framework:

- ** the right to know and have access to current information on the state of the environment and natural resources, especially on pollutants, products and situations which pose immediate or longer term threats to human health, property, resources and the environment;
 - ** the right to be consulted and to participate in decision making concerning activities likely to have a significant effect on health, property, resources and environment;
 - ** the right to legal remedies of individuals and groups whose use of natural resources or the environment has been or may be significantly affected by an on-going or planned activity, including the right of access to and due process and treatment in administrative and judicial proceedings;
- * executing more projects in co-operation with community groups and NGOs, and even increasingly, through them.

191. At the international level, it is recommended that governments establish or strengthen procedures for official consultative status and more meaningful participation of capable and qualified NGOs in all intergovernmental organizations with major activities relevant to environmental protection and sustainable development. Bilateral and multilateral development assistance agencies, especially UNDP and the World Bank, should also identify and increasingly work with and through national and local NGOs in executing sustainable development projects.

7.2 The Scientific Community

192. Independent science academies, institutes, and equivalent bodies at the national level have become a major source of authoritative studies and advice on many key environmental issues. At the international level, there are several major organizations and networks for linking the world scientific community, for undertaking special research and focusing attention on critical environmental and resource use issues, globally and regionally (e.g. the International Council of Scientific Unions (ICSU), the International Union for Conservation of Nature and Natural Resources (IUCN); and the recently established African Academy of Sciences).

193. At the national level, governments should also establish or strengthen science academies and institutes, support independent groups of scientists, and support efforts to increase their capacity to provide timely and authoritative assessments and advice on critical environmental and natural resource issues.

194. At the international level, governments and private foundations should together help increase the capacity of international environmental NGOs and scientific organizations such as ICSU and IUCN to identify and provide timely and authoritative analyses and assessments of critical environmental and natural resource problems.

7.3 Industry

195. There are mutual advantages to be gained by both industry and governments through working more closely together on, for example, basic principles and guidelines regarding agreements, laws and regulations governing investment and trade. World industry has recently taken

some significant steps towards addressing these issues through various international associations (e.g. the 1984 International Chamber of Commerce/World Industry Conference on Environmental Management (ICC/WICEM), and through voluntary guidelines concerning industry practices on environmental, natural resources and science and technology measures (e.g. OECD Guiding Principles for Multinational Enterprises), but few have as yet been extended to or applied regionally in Africa, Asia and Latin America.

196. At the national level, governments and industry should establish joint advisory councils for sustainable development for mutual advice, assistance and co-operation in helping to shape and implement policy, laws and regulations for making the transition to more sustainable forms of development. At the international level, especially in the African, Asian and Latin American regions, governments should establish special negotiating groups with members from government, industry and NGOs to develop a basic international code of conduct for sustainable development, drawing on and extending relevant existing voluntary codes.

8. Investing in Our Future

197. Those industrialized countries that mounted significant environmental protection programmes during the 1970's, and succeeded in rolling back the damage costs of high levels of first generation pollutants, saw expenditures on environmental measures rise from about 0.3 per cent of the Gross National Product (GNP) in 1970 to between 1.5 per cent and, in some countries, around the end of the decade, 2.0 per cent of GNP. This does

not include expenditures on resource management, (i.e. soil and water conservation, reforestation, parks and protected areas, wildlife, fisheries, conservation, etc..) for which estimates are not available.

198. Those industrialized and developing countries that did not mount significant programmes, saw the damage costs of environmental pollution and resource deterioration rise enormously instead. Given the transition trends, those industrialized countries with advanced programmes either will see expenditures on environmental protection rise between 20 to 100 per cent just to maintain current levels of quality, or they will see increased damage to health, property and ecosystems, or both.

199. Expenditures on resource management will also rise significantly (e.g. restoring Europe's forests), although a reorientation of some current agricultural, energy and other policies along the lines proposed in this report could avoid potentially much higher levels of expenditure on curative and restorative measures.

200. Given the transition trends, those industrialized and developing countries without advanced programmes will see expenditures mount to similar levels to halt destruction of their resource base for development, restore past damage and, in many countries, roll back the first and second generation of pollutants. Or, they will see their potential for economic growth and development further undermined by advancing destruction and depletion of their basic resource capital, and the health, property and resource damage costs of advancing pollution. However, reorientation of agricultural, energy, forestry, industry and other policies along the lines proposed in this report could avoid ultimately higher levels of expenditures on restorative and curative measures.

201. Both industrialized and developing countries can reduce the levels of future expenditures/damage costs significantly and also enhance their future economic prospects by introducing the Sources Mandate and making central and sectoral agencies responsible for sustaining and enhancing environmental and resource stocks. Expenditures for environmental protection and resource management would then gradually be built into the budgets of the agencies and industries whose policies and projects give rise to the costs.

202. Developing countries, however, will need a significant increase in financial support from international sources to meet the enormous costs that they face through the transition, and this increase will need to come from both traditional and new sources.

8.1 New Sources of International Financing

203. The international community still relies largely on three sources of financing unchanged since the establishment of the United Nations forty years ago: assessed contributions from governments; voluntary contributions by governments; and funds borrowed in capital markets by the World Bank and other international financial institutions.

204. Assessed contributions from governments have traditionally been used largely for the administrative and operating costs of international organizations and are basically not intended for multilateral assistance. Moreover, the prospects of raising significant additional funds through assessed contributions are not good. The assessment system, based on predetermined shares of an agreed upon budget, creates powerful constraints against efforts to expand resources and focus them on action

projects sustained over a long period of time. Most countries, large and small, are usually reluctant to increase their assessed share of the budget, and the few most influential countries with the largest assessed shares consistently try to hold down the total level of expenditure and limit budgetary growth. The total assessed contributions from governments are also significantly smaller than the amount provided through voluntary contributions.

205. Voluntary contributions by governments give the overall revenue system some flexibility but they cannot be adjusted readily to meet new or rising requirements. Being voluntary, the flow of funds is entirely discretionary and unpredictable. The commitments are also extremely short-term as pledges are normally made for only one or two years in advance. Consequently, they provide little security or basis for effective planning and management of international actions requiring sustained, longer term efforts and programmes. Voluntary contributions also are even more vulnerable than assessed contributions to the frequently shorter term mandates, perspectives and policies of individual governments. They therefore cannot provide an assured basis and flow of funds for international programmes serving the often common and longer term interests of all nations. For international environmental action, most of the limited funds provided so far have been through voluntary contributions, principally through UNEP and NGOs.

206. Given the limitations and constraints for current major sources and modalities for funding, it is now necessary and timely to consider options for additional

resources and new sources and means for financing international action in support of environment and sustainable development on a more assured basis over longer periods of time.

207. In addition to the proposals earlier in this report concerning the introduction of the Sources Mandate and the integration of sustainable development objectives and criteria into the policies and programmes of bilateral and multilateral development assistance and financial agencies, and to increase the flow and proportion of funds dedicated by them to environmental protection and resource conservation programmes in developing countries, it is also recommended:

- * to establish a World Conservation Bank or a special or major new facility in the World Bank;
- * to raise additional funds for international environmental protection and natural resource management programmes from one or more new and more automatic sources of revenue.

8.2 A World Conservation Bank (WCB) or Special Facility

208. It is proposed that governments and public and private financial institutions establish a World Conservation Bank to supplement existing and future efforts by aid agencies, multilateral development banks and commercial banks to finance more sustainable development through improved emphasis by them on conserving the natural resource base in developing nations.

209. The World Conservation Bank would be structured (see Annex 2 to Chapter 12) to attract and share capital, and several options are being actively considered:

- * The World Conservation Bank could be independent in so far as it could be funded, initially at least, by aid agencies and international banks, and perhaps the multilateral development banks. (Since one of its main functions would be to fund the development and implementation of national conservation strategies, the World Conservation Bank might also have a special relationship with a revised IUCN structure. This concept would be consistent with the IUCN's relationship with both the public and private sectors).
- * The new institution could be included among the World Bank group, or be developed as a special and new major facility within the World Bank itself. In either case it would enjoy greater access to funding, and access to World Bank group expertise.

210. As essentially a bank, it must add value to be viable. The World Conservation Bank could add value in several ways:

- * It could solicit funds from international banks in the private sector for the purpose of financing (or co-financing, with the multilateral development banks and bilateral aid agencies) conservation-oriented projects in developing nations. The private banks would be encouraged to fund projects and programmes where the identification of economic yields can be determined (e.g. developing commercial ventures related to the non-consumptive uses of living resources, like tourism, game farms, etc., in conjunction with the private sector). The projects could be self-contained or be part of larger and more comprehensive development projects.

- * It could participate in the lease, purchase, development and management of environmentally important habitat and wildlife necessary to maintain or increase biological diversity.
- * It could enter into arrangements with multinational companies, many of which have made major investments in developing nations, and in some cases developed significant trading relationships, and induce them to enter into conservation and sustainable development projects which could be financed or co-financed by the banks.
- * A World Conservation Bank could innovate means of financing. Various groups, for example, are currently investigating means to finance the acquisition of land and other environmental projects in developing nations through international debt swaps. In Latin America and Africa, this could involve the acquisition of US dollar-denominated debt of a specific country on the open market at a discount. This debt would be converted to the appropriate local currency at the official rate of exchange and utilized to acquire land, etc.. Where substantial discounts can be obtained (upwards of 50 per cent), acquisitions of important environmental assets could be made at comparatively low cost.
- * A WCB could provide a suitable vehicle for processing the above transactions ("Bankrolling Environmental Solutions"). It could:
 - ** develop the expertise to negotiate transactions at a highly sophisticated level;

- ** provide the financial vehicle through which transactions could be processed and funds could be received and disbursed;
 - ** provide a central point for communication, between banks, NGOs and other interested parties, and government departments of debtor nations;
 - ** perform a useful monitoring role.
- * It could work in close liaison with field staff of IUCN, other international bodies, local governments and local and international NGOs, with a view to:
 - ** assisting with the identification of suitable projects and programmes (national conservation strategies);
 - ** packaging such projects and programmes and marketing them with investors (e.g. private banks, multilateral development banks, and bilateral aid agencies;
 - ** controlling and monitoring expenditures once finance has been obtained;
 - ** post-project monitoring in conjunction with local parties.
- * It should provide a highly professional service, especially as a facilitator between investor and/or donor and the recipient agency or country.

211. The World Conservation Bank would need excellent credibility with governments, the aid agencies, the multilateral development banks and other international organizations, since it would aim to obtain funds from those organizations on the assumption that the funds could be put to more productive use.

212. The proposal for a World Conservation Bank is far-reaching and needs to be approached step by step, with systematic feasibility and case studies. The Commission, in endorsing the concept, would call upon an objective group of participants from the public and private sectors to prepare a feasibility study demonstrating how such a Bank would work in practice.

8.3 New Sources of Revenue and Automatic Financing

213. The search for new and especially more automatic sources and means for financing international action goes almost as far back as the United Nations itself. It was not until the Plan of Action to Combat Desertification was approved by the United Nations General Assembly in late 1977, however, that governments were able to approve officially the principle of automatic transfers. That Plan called for the establishment of a special account which could draw its resources from "member states, international taxation, multilateral financing institutions and interest-free loans, and additional measures of financing, including fiscal measures entailing automaticity, which should be the subject of a study by a group of high-level experts in international financing".

214. A series of studies over the next few years, and relevant reports by the Brookings Institutions and the Dag Hammarskjold Foundation, examined a growing list of possibilities including:

- * revenue from the use of international commons (e.g. from ocean fishing and transportation, from sea-bed mining, from Antarctic resources, from parking charges for geostationary communications satellites);
- * taxes on international trade (e.g. a general trade tax; taxes on specific traded commodities, on invisibles, or on surpluses in balance of trade; a consumption tax on luxury goods);
- * international financial measures (e.g. a link between special drawing rights and development finance; International Monetary Fund gold reserves and sales).

215. In its 1981 report "North-South": a Programme for Survival" the Brandt Commission also emphasized the accelerating need for, and called for raising additional funds from more automatic sources such as those cited above. That appeal was largely ignored and, in its follow-up report in 1983 on "Common Crisis: North-South Co-operating for Economic Recovery" the Brandt Commission strongly urged that these "most 'futuristic' of all the Report's proposals" not be lost completely from view. Nevertheless, they again sunk below the short-term horizon of the international agenda.

216. The World Commission on Environment and Development was specifically given the mandate by the United Nations General Assembly to look once again beyond that limited horizon. We have done so and, given the compelling nature, pace and scope of the different transitions affecting our economic and ecological systems as described in previous Chapters of our report, we consider that at least some of those proposals for additional and more automatic sources of revenue are fast becoming less futuristic and more urgent. This Commission particularly

considers that proposals regarding revenue from the use of global commons and natural resources now warrant and should receive serious consideration by governments and the United National General Assembly.

217. It is already a well established practice within most countries that those using public lands or resources pay a fee or rental (e.g. for extracting timber or minerals; fishing and hunting licences, etc..) or a user-charge (e.g. national park entry fees, boating licences, etc.). In many cases this revenue is used for protecting and improving the same area or resource being used.

218. Similar practices and charges for the use of global commons and natural resources should now be seriously considered. They are technically feasible, and the new Law of the Sea Convention includes provisions for generating revenue from and for the exploration and exploitation of sea-bed minerals. Others have not been put in place in spite of the fast increasing need for additional revenue for expanded international programmes for environmental protection and sustainable development. The principal obstacle is the lack of political will among states to do so.

219. Their reluctance is due in part to a concern that governments may lose some of their budgetary authority over the secretariats of international organizations. That need not and should not happen, as states should still retain their collective authority over how the additional revenue is allocated and spent. On the other side of the "coin" there is another fundamental and continuing concern that has been succinctly and graphically stated by Barbara Ward. After stimulating and leading the global environment debate through most of

the 1970s, in one of the last articles written before her death she addressed the question of a new world system for generating additional revenue and concluded:

"No Nation has ever half way peacefully entered the modern world without a progressive income tax. We have no reason to suppose our small planet is any other condition. Automatic transfers must come. Otherwise we live on in an order of privilege and patronage. Such orders, as we know from history, simply do not last."

ANNEX 1 TO CHAPTER 12

LIST OF PROPOSED PRINCIPLES, RIGHTS AND OBLIGATIONS
FOR A UNIVERSAL DECLARATION AND SUBSEQUENT CONVENTION
ON ENVIRONMENTAL PROTECTION AND SUSTAINABLE DEVELOPMENT

I. General Principles, Rights and Obligations*

1. Fundamental Human Right
2. Inter-Generational Equity
3. Conservation and Sustainable Use
4. Environmental Standards and Monitoring
5. Prior Environmental Assessments
6. Prior Notification, Access and Due Process
7. Sustainable Development and Assistance
8. General Obligation to Co-operate

II. Interstate Rights and Obligations Concerning
Transboundary Environmental Protection and
Sustainable Resource Use

9. Reasonable and Equitable Use
10. Prevention and Abatement
11. Strict Liability
12. Prior Agreements When Prevention Costs Greatly
Exceed Harm
13. Non-Discrimination
14. General Obligation to Co-operate on Transboundary
Environmental Protection and Sustainable Resource
Use
15. Exchange of Information
16. Prior Assessment and Notification
17. Prior Consultation
18. Co-operative Arrangements for Environmental
Monitoring Research and Standard Setting
19. Emergency Situations
20. Equal Access and Treatment

III. State Responsibility

21. Breaches of an International Obligation

IV. Peaceful Settlement of Disputes

22. Mutual Agreement and Binding Settlement

*In an interdependent world, the obligations of States are
also the source of their individual and collective rights.

LIST OF PROPOSED PRINCIPLES, RIGHTS AND OBLIGATIONS
FOR A UNIVERSAL DECLARATION AND SUBSEQUENT CONVENTION
ON ENVIRONMENTAL PROTECTION AND SUSTAINABLE DEVELOPMENT

I. GENERAL PRINCIPLES, RIGHTS AND OBLIGATIONS*

Fundamental Human Right

1. The fundamental right of all human beings to an environment adequate for health and well-being.

Inter-Generational Equity

2. The obligation of States to conserve and use the environment and natural resources for the benefit of present and future generations.

Conservation and Sustainable Use

3. The obligation of States to maintain ecosystems and ecological processes essential for the functioning of the biosphere, to preserve biological diversity, and to observe the principle of optimum sustainable yield in the use of living natural resources and ecosystems.

Environmental Standards and Monitoring

4. The obligation of States to establish adequate environmental protection standards and to monitor changes in and publish relevant data on environmental quality and resource use.

Prior Environmental Assessments

5. The obligation of States to undertake or require prior assessments of proposed policies or activities which may significantly affect health, the environment or sustainable use of a natural resource.

*In an interdependent world, the obligations of States are also the source of their individual and collective rights.

Prior Notification, Access and Due Process

6. The obligation of States to inform in a timely manner all persons likely to be significantly affected by a planned activity and to grant them equal access and due process in administrative and judicial proceedings.

Sustainable Development and Assistance

7. The obligation of States to ensure that conservation is treated as an integral part of the planning and implementation of development activities and to provide assistance to other States, especially to developing countries, in support of environmental protection and sustainable development.

General Obligation to Co-operate

8. The obligation of States to co-operate in good faith with other States in implementing the preceding rights and obligations.

II. INTERSTATE RIGHTS AND OBLIGATIONS CONCERNING
TRANSBOUNDARY ENVIRONMENTAL PROTECTION
AND SUSTAINABLE RESOURCE USE

Reasonable and Equitable Use

9. The obligation of States to use transboundary natural resources in a reasonable and equitable manner.

Prevention and Abatement

10. The obligation of States to prevent or abate any transboundary environmental interference which could cause or causes significant harm (but subject to certain exceptions provided for in 11 and 12 below).

Strict Liability

11. The obligation of States in carrying out or permitting certain dangerous but beneficial activities to

take all reasonable precautionary measures to limit the risk and ensure that compensation is provided should substantial transboundary harm occur, even when the activities were not known to be harmful at the time they were undertaken.

Prior Agreements
When Prevention Costs Greatly Exceed Harm

12. The obligation of States which plan to carry out or permit activities causing transboundary harm which is substantial but far less than the cost of prevention, to enter into negotiations with the affected State on the equitable conditions under which the activity could be carried out. (If no agreement can be reached, see 22 below)

Non-Discrimination

13. The obligation of States as a minimum to apply at least the same standards for environmental conduct and impacts regarding transboundary natural resources and environmental interferences as are applied domestically (i.e. do not do to others what you would not do to your own citizens).

General Obligation to Co-operate
on Transboundary Environmental Protection
and Sustainable Resource Use

14. The obligation of States to co-operate in good faith with other States to achieve sustainable use of transboundary natural resources and effective prevention or abatement of transboundary environmental interferences.

Exchange of Information

15. The obligation of States of origin to provide timely and relevant information to other concerned States regarding the use of transboundary natural resources or environmental interferences.

Prior Assessment and Notification

16. The obligation of States to provide prior and timely notification and relevant information to other concerned States and to make or require assessments of

planned activities which may have significant transboundary effects for environment and sustainable development.

Prior Consultations

17. The obligation of States of origin to consult at an early stage and in good faith with other concerned States regarding existing or potential activities that have significant transboundary implications for health or sustainable use of natural resources or the environment.

Co-operative Arrangements for Environmental Monitoring, Research and Standard Setting

18. The obligation of States to co-operate with concerned States in monitoring, scientific research and standard setting regarding transboundary natural resources and environmental interferences.

Emergency Situations

19. The obligation of States to develop contingency plans regarding activities that present significant risks to health, property, environment and resources of other States, and of States of origin to promptly warn, provide relevant information to and co-operate with concerned States when emergencies occur.

Equal Access and Treatment

20. The obligation of States to grant equal access, due process and equal treatment in administrative and judicial proceedings to all persons who are or may be affected by transboundary interferences with their use of a natural resource or the environment.

III. STATE RESPONSIBILITY

21. The obligation of States to cease activities which breach an international obligation regarding the environment and to provide compensation for the harm caused.

IV. PEACEFUL SETTLEMENT OF DISPUTES

22. The obligation of States to settle environmental disputes by peaceful means. If mutual agreement on a solution or on other dispute settlement arrangements is not reached within 18 months, the dispute shall be submitted to conciliation at the request of any of the concerned States and, if unresolved, thereafter to arbitration or judicial settlement .

ANNEX 2 TO CHAPTER 12

POSSIBLE STRUCTURE OF THE PROPOSED WORLD CONSERVATION BANK

In a submission to the Commission, a suggested breakdown of capital was Class 'A' shares - governments; Class 'B' shares - government 'agencies' (e.g. USAID, CIDA); Class 'C' shares - World Bank and multilateral development banks; Class 'D' shares - Private international banks; Class 'E' shares - Multinational corporations; Class 'F' shares - NGOs (WWF, Sierra Club, IUCN); Class 'G' shares - Private foundations; Class 'H' shares - Private citizens

- * WCB could be funded to the extent of three times paid-up capital (World Bank is funded over six times) in the world financial markets under the auspices of the World Bank: i.e. the World Bank would accept responsibility for funding function (in view of private banks' involvement they may require some say in funding).
- * Although it is expected that some of the activities of the WCB will provide for economic returns, it is acknowledged that, at least in the first 5 - 10 years after incorporation, the WCB will incur annual deficits (no estimates available at this stage). Total annual deficits will be reimbursed by shareholders in proportion to total capital and form shareholders' "annual subscription".
- * Ongoing expenses of the WCB: many of the people resources of the WCB would be provided by shareholders. Its offices could, perhaps, be housed in premises adjacent to an existing organization. The WCB would be a low cost operation.

NOTES

- 1/ U.N. State of Environment, 1982; OECD The State of Environment, 1985
- 2/ This section will be abbreviated and perhaps removed after the discussion on Chapter 11
- 3/ See Chapter ... pg ..
- 4/ See Chapter U; pg
- 5/ Check World Bank Report 1986
- 6/ A recent official Canadian study estimated the annual costs of reduced output because of soil erosion alone at over (\$1.0 billion)
- 7/ World Resources Report
- 8/ Check World Resources Report for figures
- 9/ See Chapter U, pg ...
- 10/ Cite Dourojeanni
- 11/ Cite IIED and other Case Studies in our files
- 12/ Submissions from the regional banks
- 13/ See Some Reflections on Reform of the United Nations, Maurice Bertrand, Joint Inspection Unit, United Nations, Geneva, 1985
- 14/ Cite Mandate document
- 15/ Cite India, etc...)
- 16/ Cite UNEP paper
- 17/ Cite State of Environment Reports
- 18/ Cite Submission to Oslo Hearing. Perhaps a boxed quote
- 19/ OECD, 1984 International Conference on Environment and Resources
- 20/ See Dutch suggestions
- 21/ Provisional title only; alternative suggestions include "World Survival Council", "World Council for Sustainable Development"