The Quest for Global Sustainability: International Efforts on Linking Environment and Development

Citation
Selin, Henrik, and Björn-Ola Linnér. "The Quest for Global Sustainability: International Efforts on Linking Environment and Development." CID Graduate Student and Postdoctoral Fellow Working Paper Series 2005.5, Harvard University, Cambridge, MA, January 2005.

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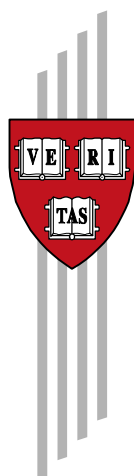
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The Quest for Global Sustainability: International Efforts on Linking Environment and Development

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Working Paper No. 5, January 2005

Working Papers

Center for International Development
at Harvard University

CITATION, CONTEXT, AND PROGRAM ACKNOWLEDGEMENTS

ABSTRACT

This paper analyzes global cooperation and policy making on the integration of environment and development issues over the 20th century up until the United Nations Conference on Environment and Development in Rio de Janeiro in 1992. The paper applies four analytical perspectives to these issues: the emergence and influence of an international environment and development discourse; an international political push for more multilateralism and building of new multilateral institutions; power politics including the influence of Cold War relations; and North-South politics and conflicts. These analytical perspectives are applied through four historical periods. First, we study how early international action on species protection and natural resource management were expanded into a broader environment and development agenda in the 1960s. Second, we examine the preparations for, holding of and outcomes of the 1972 United Nations Conference on the Human Environment. Third, we study the international debate and policy actions on environment and development issues in the early 1970s to early 1980s. Fourth, we examine environment and development events and actions in the early 1980s through to the decision by the UN General Assembly to organize UNCED.

Much of the existing literature on international cooperation and policy making on sustainable development looks at this issue from a comparatively short historical perspective. In this paper, we argue that there is a need for a much more detailed examination of pre-UNCED events on environment and development, which are an important part of international politics that have not yet been subject to much sustained analytical attention and in-depth analysis. Studying these early efforts on environment and development issues in more detail will help us better understand conceptual and political backgrounds to UNCED and ongoing efforts on sustainable development. We argue that all four analytical perspectives provide important insights into global cooperation and policy making on environment and development issues through all four historical periods. There are moreover often strong connections between different policy efforts over time, as one event is shaped by and builds on earlier ones. Examining specific explanatory factors, North-South politics and conflicts are increasingly important in the post-WWII period.

ACRONYMS AND ABBREVIATIONS

ECOSOC	United Nations Economic and Social Council
ESPPA	Environmental Science and Public Policy Archives, Harvard University
FAO	United Nations Food and Agriculture Organization
IBP	International Biological Programme
ICSU	International Council of Scientific Unions
IGY	International Geophysical Year
ITCPN	International Technical Conference on the Protection of Nature
IUCN	International Union for the Conservation of Nature and Natural Resources
IUPN	International Union for the Protection of Nature
MAB	Man and the Biosphere
MEA	Multilateral Environmental Agreement
MFAA	Ministry for Foreign Affairs Archives, Sweden
OECD	Organization for Economic Cooperation and Development
UN	United Nations
UNA	United Nations Archives, New York
UNCED	United Nations Conference on Environment and Development
UNCHE	United Nations Conference on the Human Environment
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNIDO	United Nations Industrial Development Organization
UNSCCUR	United Nations Scientific Conference on the Conservation and Utilization of Resources
UNSCEAR	United Nations Committee on Scientific Committee on the Effects of Atomic Radiation
WCED	World Commission on Environment and Development
WCN	World Charter for Nature
WCS	World Conservation Strategy
WHO	World Health Organization
WMO	World Meteorological Organization
WSSD	World Summit on Sustainable Development

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1. Introduction: The Quest for Global Sustainability

The quest for global sustainable development is espoused by a multitude of governments, inter-governmental organizations, non-governmental organizations and, most recently, private companies. The World Summit on Sustainable Development (WSSD), held in Johannesburg in 2002, was the latest global forum to assess progress in achieving sustainable development and to set priority areas for continued efforts, but international political and scientific efforts on the simultaneous achievement of environmental protection and social and economic development started long before WSSD. Four decades of extensive high-level international cooperation and policy making on environment and development, however, have proven to be a long and difficult road towards a global environmentally sound development, mixing a few policy successes with a frequent lack of effective implementation and behavioral changes.

The UN Charter from 1945 assigns governments a responsibility to work for peace, freedom, human rights and social and economic progress for all people. Yet, the Charter was silent on the role of environmental issues in achieving these goals. As indications of widespread ecological deterioration became acknowledged in the 1960s, voices were quickly raised for expanding UN activities into the environmental field. In 1970, UN Secretary-General U Thant remarked that "never in the twenty-five-year history of the United Nations has there been a problem of more relevance to all nations than the present environment crisis," and added that "the time has come for the United Nations, in the spirit and letter of the Charter, to be a center for harmonizing the actions of nations in solving the problems of the human environment" (Cordier and Harrelson, 1977: 346).

Promoting global environmentally sound social and economic development has been a central policy challenge for the United Nations and international and domestic politicians and policy makers since the 1960s. In an ongoing, multi-year research project, we study global attempts under to integrate environment and development issues on conceptual and institutional levels, as well as efforts to translate these into international and domestic action. These issues are not only of historical interest, but they can give us a better understanding of the origin of the ongoing sustainability debate and highlight some of the central factors that continue to influence cooperation and policy making on sustainable development. We argue that some of the major obstacles towards more effective implementation and progress can be found in the very factors that influence and shape the policy process.

In this paper, we look at major political events, efforts and policy developments on environment and development that preceded the World Commission on Environment and Development (the so-called Brundtland Commission). We argue that these form an important conceptual, political and institutional background to the Brundtland report *Our Common Future*, published in 1987, which popularized the concept of sustainable development and brought it into the center of the environment and development debate. The paper identifies factors influencing cooperation and policy making on environment and development and discusses how these explanatory factors shape policies and outcomes (or lack thereof). We track these issues up to the United Nations Conference on Environment and Development (UNCED), held in Rio de Janeiro, in 1992.

Much of the existing academic literature on international cooperation and policy making on sustainable development looks at the sustainable development issue from a comparatively short historical perspective (Toman, 1994; Goodland, 1995; Bartelmus, 2003; Howarth, 1997; Faucheux, Pearce and Proops, 1996). This literature generally begins in the early 1980s with the creation of the Brundtland Commission and views *Our Common Future* as one of the first substantial international policy attempts on environment and development. As a result, there is little in-depth literature on where the Brundtland report came from

– was it a completely new look at the problems of environment and development, or can it better be explained as a continuation of a longer process of debate and cooperation on these issues?

We believe that a much more detailed examination of pre-Brundtland events on environment and development will help us better understand the conceptual and political background of the Brundtland Commission, its report and subsequent international political and policy efforts on sustainable development. A deeper understanding of how the environment and development issue was shaped in the past will give us a better understanding of ongoing cooperation and policy making on issues relating to sustainable development. As a result, this discussion paper emphasizes and examines the process of identifying those central factors that were most crucial in shaping the global environment and development agenda up to UNCED, and the political efforts to address these issues during this time.

In this paper, we apply four analytical perspectives. These analytical perspectives, which all exist in the international relations literature but have not been systematically applied and compared to each other in the area of environment and development, are: the emergence and influence of an international environment and development discourse; an international political push for more multilateralism and building of new multilateral institutions; power politics including the influence of Cold War relations; and North-South politics and conflicts. We use these analytical perspectives to seek a deeper understanding of which forces were most important in shaping early international cooperation and policy making on environment and development, and how this cooperation and policy making fed into the sustainability debate and policy process that began in the late 1980s, and still continues.

The paper begins a brief discussion of the four analytical perspectives. This is followed by an in-depth look at four historical periods, which provide examples of how different political and social factors created and shaped the environment and development agenda. First, we examine how international action on species protection in the early 1900s and efforts on natural resource management after World War II were expanded into a broader environment and development agenda in the 1960s. In doing so, we look at the early debate on species protection and natural resources, multilateral efforts on ecological protection and institution building, the role of colonialist politics and North-South relations, and the emerging influence of Cold War politics.

Our second example is the preparations for, holding of and outcomes of the 1972 United Nations Conference on the Human Environment (UNCHE), which was the first global political conference that was designed to simultaneously address environment and development issues. In this section, we look at the conceptualization and debate of a threatening ecological crisis shaping the conference agenda and discussions, characters and implications of East-West and North-South dimensions of international politics and conflict on environment and development issues, and calls for increased multilateral cooperative efforts and attempts at institution building on environment and development issues.

Third, we look at international debate and policy actions on environment and development issues in the early 1970s to early 1980s, including the holding of the Cocoyoc Symposium in 1974 and the launching of the World Conservation Strategy in 1980 and the World Charter for Nature in 1982. Here, we focus on central themes of the environment and development debate, accelerated attempts at international ecological preservation through the creation of multilateral organizations, agreements and programs, the role of international organizations and countries pressing for multilateral action, the continuation of East-West mistrust and Cold War politics, and how persisting North-South conflicts influence political and policy efforts on environment and development issues.

Fourth, we examine events in the early 1980s through the World Commission on Environment and Development, the presentation of its report *Our Common Future* in 1987, and the decision by the UN General Assembly to hold UNCED. Again, we do this by tracing the environment and development

debate, examining the influence of international organizations and other political strives for continued and increased multilateral action, the role of East-West power politics, and the influence of growing differences between industrialized and developing countries. The paper ends with concluding remarks on our case study and a discussion of central areas for continued research.

2. Analyzing Global Cooperation and Policy Making on Environment and Development

Global politics and policy making on environment and development is likely to be influenced by several factors, such as international conflict and security considerations, population growth, urbanization and migration, economic and social trends, production and consumption patterns, scientific and technological change, international institutions, environmental change, and/or cultural habits and values (World Resources Institute 1998; Kates and Parris, 2003; Taylor, Watts, and Johnston, 2002). In this section we group and discuss these different factors into four sets of categories and analytical perspectives.

2.1 Four Analytical Perspectives

In an attempt to identify the most important sets of determinants over time, this discussion paper examines early efforts on linking environment and development and the political and institutional background to the concept of sustainable development with respect to four sets of analytical perspectives, or analytical lenses: the emergence and influence of an international environment and development discourse; growing multilateralism and the building of new multilateral institutions; power politics including the influence of Cold War relations; and North-South politics and conflicts.

2.1.1 Emergence and Influence of an International Environment and Development Discourse

One possible explanatory factor relating to the global politics and policy making on environment and development is the notion of a severe environmental crisis due to uncontrolled ecological deterioration, triggering demands for policy responses. Ecological deterioration and loss of species received international political attention already in the early 20th century, and political, media and public attention to issues of pollution, resource depletion and population grew after WWII. Scholars have demonstrated the existence of an environmental discourse by the 1960s, particularly in industrialized societies (Hajer, 1995; McNeill, 2000; Worster, 1994; Dalton, 1994; Hays, 1985; Opie, 1998; Linnér, 2003).

The term "discourse" in this sense characterizes an ongoing historic process of creating meaning by systematizing statements. A discourse is expressed by talking about a particular object, as well as through its related symbols, practices and institutions. Symbols should be understood in relation to their specific use within a discourse, and the rules that guide this use; what the French philosopher Michel Foucault calls their 'grammatics.' These selective mechanisms involve claims of truth and rules of what it is possible and not possible to say, and who is allowed to speak (Foucault, 1972: 219-225). This discourse can be identified and analyzed by examining, for example, relevant political statements and speeches, policy debates and policy documents, popular and academic studies, and public perceptions.

By the 1960s 'the environment' was formed into a distinct international and domestic political field with its own issues, symbols, practices and institutions. The growing political belief that accelerating industrialization could result in a severe international ecological crisis and the resultant discursive position of environmental issues explains, at least in part, why the environment became a priority issue area in international politics in the 1960s. In addition to concerns that were expressed by international and domestic policy makers, there was a growing public pressure on policy makers in many industrialized countries to deal with both domestic and transboundary environmental threats.

The environmental discourse early on connected issues of ecological deterioration and the growing demand for natural resources with human development issues. As such, the international environmental debate and discourse from the beginning included and addressed intersecting environment and development issues (Bäckstrand, 1971; Rambach, 1971; Campbell, 1973; Engfeldt, 1973). Issues that were raised for industrialized countries included levels of consumption, resource use, and air and water pollution and its health effects (Carson, 1962; Rowland, 1973; Caldwell, 1996). Concerns for developing countries focused on population issues and the improvement of social conditions (for example, housing and access to clean water) and economic conditions (for example, financial wealth) (Ehrlich, 1968; Meadows et al., 1972; Rowland, 1973).

This environment and development related international discourse has evolved over the past four decades, up until the present time, shaping perspectives and debates and feeding into cooperation and policy making. In this paper, we identify major components of this environment and development discourse at our four historical periods and link these to related cooperation and policy developments.

2.1.2 Growing Multilateralism and the Influence of International Institutions

Second, a focus on multilateralism and the creation of international institutions based on states' joint interests examines how states realize common interests through interactions and negotiations and the ways in which a growing number of international treaties and organizations in the post WWII world shape policy making and outcomes. These interest based approaches to international cooperation and policy making take the position that states frequently identify and realize common interests (and sometimes even common values) through interaction and cooperation (Keohane, 1984; Keohane and Nye, 2001).

Those working with interest-based explanations conceptualize states as rational egoists with independent utility functions concerned only with their own absolute gains and losses. Consequently, states in the interest-based neoliberal framework are seen to be interested in international cooperation and the formulation and implementation of common policies and obligations as long as they perceive that they are in a situation where they can increase their individual absolute benefits (without necessarily paying attention to how it affects the gain and losses of other states in relativistic terms) (Keohane, 1988).

Scholars have demonstrated how a dramatic increase in the number of international organizations over the past century has facilitated a never before seen level of multilateral cooperation and activities, linking countries and people (Beck 2000; Jameson 1998a, 1998b; Routledge, 2002). An increase in transnational transportation and flows of capital, resources, materials, substances, communication infrastructure and mental globalization may reinforce this interdependence between countries and people (Keohane and Nye, 2001; Castells, 1996, 1997, 1998). International institutions and transnational flows of capital, resources, and information delineate common standards for behavior that reach and can affect abilities and choices by local actors. In turn, a multitude of local actions such as the election of political leaders and consumer decisions influence the behavior and decisions by transnational actors (Jasanoff and Long Martello, 2004).

In this paper, we discuss how efforts to promote and design multilateral cooperation on environment and development issues have occurred over time. In addition, we examine the influence of international institutions on cooperation and policy making. Many countries, particularly smaller non-aligned ones, saw UN involvement in environment and development issues as a way to promote both international cooperation on these issues and strengthen the role of the United Nations through the formulation of related principles, agreements, organizations and programs (Engfeldt, 1973; UNCHE Country Reports). These strives toward increased multilateralism and UN involvement, however, were opposed by other countries, protective of their national sovereignty. This resistance has been expressed both by larger

industrialized countries and developing countries. These conflicts were visible in, for example, the development of international environmental law and the creation of the United Nations Environment Programme (Campbell, 1973; Rowland, 1973; Caldwell, 1996; Strong, 2001).

In addition, in a context of a growing number of international organizations and policy efforts addressing environment and development issues, representatives of international organizations often argue for their involvement in international policy making and implementation. In our case study on international cooperation and policy making on environment and development, we see evidence of this. As many UN specialized agencies and other international organizations such as the International Union for the Protection of Nature (IUPN, from 1953 the International Union for the Conservation of Natural Resources, IUCN) and the International Council of Scientific Unions (ICSU) became involved in the environment and development agenda, they often supported calls for more international cooperation. They also sought to keep specific environment and development issues on the international agenda through organizing meetings, creating programs and publishing reports.

2.1.3 Power Politics

Third, international relations literature frequently looks at traditional power politics to explain international politics and outcomes. From a Realist perspective focusing on the role of material capabilities, international politics and outcomes are seen as resulting from the cost-benefit assessments of advantages made by the most powerful state(s). International politics is seen as a zero-sum game: one state's gain is inevitable another state's loss. Calculations by states are based on (but not exclusively determined by) the preferences (utility functions) of those states. This view is reflected in the perhaps most well known power-based explanation, Robert Keohane's hegemonic stability hypothesis (Keohane, 1980). Expressing a general skepticism about the possibility of international cooperation, the hegemonic stability hypothesis argues that institutions will emerge only as the result of independent action by one supreme state that holds the necessary power resources.

Undoubtedly, power calculations and exercise of material resources related to national security can be important in shaping international politics and outcomes. In this paper, we explore cases where power and domestic security consideration influence cooperation and policy making on environment and development related issues. For example, international action on species protection in the early 1900s included European powers imposing species protection measures in their foreign colonies and territories. Between 1945 and the early 1990s, Cold War politics and the power struggle between the United States and the Soviet Union were dominating factors for much international cooperation and policy making. Cold War politics and East and West competition and cooperation also influenced international policy making on environment and development issues.

The bi-polar international political order that emerged shortly after WWII included strong geopolitical security concerns and mutual efforts by the United States and the Soviet Union to balance their power and political influence in the international political system. These geopolitical security concerns contributed to a political and scientific focus on natural resource security as a factor of social and political stability and instability in individual countries and the international system. This is evident in, for example, issues relating to the geopolitics and science of natural resource management in the 1940s to 1960s (Linnér, 2003) and the preparations for and holding of the United Nations Conference on the Human Environment in 1972 (Rowland, 1973; Strong, 2001).

In addition, the environment was used as an issue area for building trust between the two blocs during times of détente. This was the case in the late 1960s as "the environment" became an international political issue (Caldwell, 1996), and can also be seen in efforts to tackle transboundary emissions of

sulfur and other air pollutants under the United Nations Economic Commission for Europe during the 1970s (Chossudovsky, 1989).

2.1.4 North-South Politics and Conflicts

Fourth, international relations literature has looked at North-South politics and issues. Beginning at the Bandung conference in Java in 1955, many developing countries took on a more independent role in international politics. At the conference, 29 Asian and African countries, among others Burma, the People's Republic of China, Ceylon, the Indian Union and Indonesia proclaimed themselves to be a third force, beside the Eastern and Western blocs. During the period from 1955 to 1971 UN membership grew rapidly, as former colonies became independent nations. The organization had started with 51 members in 1945. By 1959 total membership had reached 83. By 1972 there were 132 members, many of these former colonies (Goodrich, 1974). With these new nations, a growing number of UN member states had an interest in strengthening the role of the United Nations Economic and Social Council (ECOSOC) on behalf of the UN Security Council and the powerful members of the East and West blocs (Arrighi, 1994; Cammack et al., 2001; Neuman, 1998; Keohane and Nye, 2001).

In this paper, we examine the influence of North-South relations and issues on attempts to formulate and implement effective environment and development policy and action in both industrialized and developing countries. Many developing countries have argued that the accelerating globalization of production and consumption have led to an increased dependence of the powerless on the powerful. Repeatedly, they have claimed that the global economy conferred an uneven exchange upon developing and industrialized countries because of the structure of an economic and trade system that was built on the North's domination in five areas: technological distribution and the capacity of large-scale investments; control of worldwide financial markets, as finance capital was becoming an increasingly important component of capitalist economy; control over the planet's natural resources, either through multinational cooperation or dependency in developing countries on income from exporting non-refined resources; media and communication monopoly; and research and development capacity to produce new technology and substances, identify harmful effects and develop alternatives (Castells, 1996, 1997, 1998; Amin, 1997).

This dependence of the South on the North is not restricted to economic issues. Scholars have argued that the least developed countries have had limited national sovereignty and ability to act across a range of political issues since the colonial period (Neuman, 1998: 9-10). This critique argues that the international division of production causes a lack of effective control over economic resources in developing countries, which maintains their dependency on the global North. This lack of control over natural resources threatens to challenge the legitimacy of domestic political order (Inayatullah, 1996). Several researchers have argued that most conflicts in developing countries during the Cold War were caused by regional or domestic factors, such as weak postcolonial state structures and challenged legitimacy of rulers (Inayatullah, 1996; Ayoob, 1984: 477-93, 1992; David, 1991: 232-56; Acharya, 1998: 172-77). This may in turn partially explain the resolve among several political leaders in the South to challenge the international economic order through the industrialized countries' environmental concern.

The detrimental effects of global political and economic systems on the South were not only emphasized by politicians from the South, but were also highlighted by decision makers, media and the public in the North. Concern in the North was expressed both because of a growing opinion in the North that the North could not resolve global problems without active cooperation by the developing countries, and also as a sign of an emerging ethical consciousness that emphasized the global household and a moral obligation of people in the North towards people in the South. For example, Zbigniew Brzezinski (1973: 726) argued that the growing inequality between developing and developed nations was becoming "the most powerful

moral imperative of our time, thus paralleling the appeal of the concept of liberty during the nineteenth century." Regardless of whether concerns over the North-South divide were expressed as a result of moral stance or of self interest, or a combination of the two, North-South relations became a crucial issue on the United Nations agenda in the 1960s.

Countries in the North and in the South often expressed different interests and preferences on environment and development issues. In this paper, we categorize the differing views between the North and the South on environment and development in terms of universalizing and differentiating views, building on earlier work by, among others, Beck (2000), Jameson (1998a; 1998b), Taylor and Buttel (1992) and Sachs (1993). These views will be discussed throughout this paper, but briefly stated, a universalizing perspective views the increasing importance of environment and development issues for accentuating common interests and the need for joint action. Based on such a view, many industrialized countries stressed that all countries and people are bound together by common fundamental interests on environment and development (UNCHE Country Reports). Early technical, scientific and political efforts on environment and development often became a vehicle for reinforcing such a view.

However, attempts to formulate international policy and programs on environment and development issues were more complex than simply promoting common interests. Many practitioners and scholars have strongly criticized the universalizing view on environment and development in which solutions to environment and development issues are seen to be based on common interests among countries and people formulated by the North (Harvey, 1990; Taylor and Buttel, 1992; Shiva, 1992; Sachs, 1993; Hajer, 1995; Guha and Martinez-Alier, 1997; Jameson, 1998a, 1998b). Hajer and Fischer (1999: 2-5) have argued that much of the early international environment and development discourse suggested much more unity and shared understanding between the countries and the cultures of the world than can be legitimately assumed. Many politicians and experts from developing countries acknowledged an accentuation of world interdependence, but questioned central conceptual and material aspects of this process (Rambach, 1971; Rowland, 1973).

While many UN efforts and other international actions on environment and development were intended to stimulate cooperation and policy making on environment and development, they also provided an opportunity to criticize the notion of one world - one interest. From the 1960s and onwards, representatives of developing countries repeatedly criticized what they saw as efforts by industrialized countries to preserve the dominance of the global North (Rambach, 1971; Rowland, 1973). Instead, they called for the creation of institutions and practices that reflected differences in situations and interests between industrialized and developing countries. Such calls were, for example, connected to calls for a new international economic order that would be more geared towards the conditions and interests of developing countries (Furtado, 1971; Furtado, 1976; Cardoso, 1979).

The conflict between proponents of universalizing and differentiating views on environment and development also concerns which specific issues are prioritized for global action. Many industrialized countries argued for only minor changes in the international economic system, and instead stressed the need for concerted action on international environmental issues (Åström, 1972; Campbell, 1973; Engfeldt, 1973). It was also industrialized countries that pressed the hardest for international action on transboundary environmental issues at the Stockholm Conference and in the aftermath of Stockholm (UNCHE Country Reports; Caldwell, 1996). Such transboundary issues included marine and river pollution, air pollution, and the trade and dispersal of hazardous substances (Caldwell, 1996).

In contrast, many developing countries have argued that primary focus should be on development issues (Rambach, 1971; UNCHE Country Reports). They have argued that economic and social development is the most effective way to address environmental concerns in developing countries (which is the majority of the world's population). Therefore, the international community should pay greater attention to

improving social and economic conditions for the poorest in order to address both development and environment issues, according to many developing countries. Concerns expressed over environmental issues by developing countries often included local land use problems, improved access to safe drinking water, and issues relating to rapid urbanization (Rambach, 1971; UNCHE Country Reports).

2.2 Materials and Methodology

Research for this paper is based on existing studies, official documentation, personal documentation and interviews. In our research we have benefited from existing studies and of international cooperation and policy making on environment and development issues (see reference list). While some of these studies have specifically addressed linkages between environment and development issues, others have had a single focus on either environment or development issues. Nevertheless, these studies have helped us trace international cooperative and policy making efforts over time and identify the most important factors driving these efforts. These studies of international cooperation and policy making, together with policy and expert analyses of particular issues, have moreover helped us identify important environment and development issues at a particular time, how they were conceived, and how expert and policy conceptions have or have not changed over time.

The primary written documentation that is analyzed in this paper is preparatory work for international meetings and programs and conference proceedings and reports from UN conferences and events addressing linkages of environment and development issues. We have moreover conducted an extensive review of related UN documentation on UN efforts on environment and development issues. These empirical data were collected from the Environmental Science and Public Policy Archives, Harvard University; the microfilm collection at Lamont Library, Harvard University; the Swedish Foreign Ministry Archive, Stockholm; and the United Nations Archive and the Dag Hammarskjöld Library, New York. In addition, we have used personal material from John Busterud, former American diplomat and environmental advisor to President Gerald Ford. This material was provided by Mark Cioc, University of California Santa Cruz.

Our research is also informed by personal interviews with people who have actively worked on global environment and development issues, several of them for over three decades. Since the summer of 2001, we have conducted semi-structured interviews with, among others, Maurice Strong (former Executive Director of the United Nations Environment Programme, who has worked on global environment and development issues since the late 1960s); Gro-Harlem Brundtland (chair of the World Commission on Environment and Development and former Norwegian prime minister, environment minister, and parliamentarian); Lars-Göran Engfeldt (Swedish Ambassador to Serbia who has worked on global environment and development issues since the late 1960s, most recently as Vice Chair at the World Summit on Sustainable Development); and Sverker Åström (former Swedish diplomat who initiated the UN proposal that resulted in the United Nations Conference on the Human Environment).

In order to capture the developmental nature of the series of more or less connected efforts, choices and outcomes relating to the global linkage and handling of environment and development issues, a process-tracing technique is used in relation to our empirical material (George and McKeowan, 1985: 35). Such a process-tracing technique sets out to examine and explain the policy process by which environment and development issues are defined and handled over time. This effort seeks to carefully examine the various roles that are played by the four sets of explanatory factors that were discussed above in shaping this process, analogous with the detective work of gathering pieces of evidence together into a discernible pattern. To this end, our research and analysis of empirical material are guided by an effort to determine the influence of the four sets of explanatory factors and how they relate to each other and how they have changed (or not changed) over time in relation to environment and development issues.

3. From Species Protection to Environment and Development

The first, limited international protection efforts relating to the natural environment were taken in the early 20th century. In this section, we apply our analytical framework to examine how the first international political action on species protection largely reflected Western interests regarding preventing ecological deterioration. An attempt to create cooperative agreements and build multilateral institutions based on common interests among Western countries can explain many of these species protection events. Several European countries also undertook more power-based actions as they imposed species protection measures in their foreign colonies and territories. After World War II, mainly European and North American countries expanded earlier species protection efforts into a broader focus on natural resource management and nature conservation that included domestic security concerns. In addition, rapid scientific and technological developments played an important role in pushing the environment and development agenda forward in this era, aided by a growing number of international scientific and political institutions.

After WWII, natural resource management and ecological protection became more clearly linked with political strives for social and economic development, in both developing and industrialized countries. It is clear that Cold War considerations and politics played a significant role in this process of linking natural resource management and development and security concerns in both the global North and the global South. In addition, European and North American policy makers and experts continued to express ecological concern for Africa, Asia and South America, while many developing countries, often only recently having gained independence from their former colonial rulers, began taking a more independent attitude on these issues in the UN and other multilateral forums. This budding North-South tension helped shape a shift from a focus on species protection in the former European colonies by Western colonial powers to a stronger voicing of development concerns of developing countries in the largely Western-generated environmental debate.

3.1 The Discourse of Species Protection and Natural Resource Management

The international discourse of species protection at the beginning of the 20th century was highly western-centered. It emerged out of domestic ecological protection efforts in Europe and North America that were expanded to include the organizing of international conferences and the negotiations of regional multilateral agreements. In some cases, it was aesthetic concerns of preserving "beautiful" wildlife that prompted such action (Hayden, 1942), but in others, countries acted to ensure long-term social and economic rewards from controlled harvesting (Barrett, 2003). In addition, northern countries debated the need to species protection efforts in foreign colonies and territories, and also imposed several sets of regulations in their colonies and territories up until WWII.

After WWII, the discourse began to change. While multilateral efforts on species protection continued, countries began debating larger issues of natural resource use and management. This change in the international discourse was fuelled by scientific and technological development and geopolitical security concerns that were related to the Cold War and intensifying competition between East and West. This discourse moreover included debates of threatening conditions in developing countries. Fears were expressed that "underdevelopment" and instability in newly independent countries could result in violent conflict with potentially severe domestic and international implications (Caldwell, 1996: 51; Linnér, 2003: 61-92).

Issues relating to a rapid population growth became a central issue in an emerging environment and development discourse in the 1960s. Again, concerns were voiced that a "population bomb" in developing countries and related demands for natural resources could cause instability and conflict with dire local and international consequences (Ehrlich, 1968; Meadows et al., 1972). At the same time, many larger developing countries began taking a much more independent stand in the United Nations in the 1960s, arguing that the international community had a responsibility to pay more attention to local and domestic development issues in the global South. In addition, public and political attention to pollution issues increased sharply in mainly industrialized countries in the 1960s (Carson, 1962), leading to calls for increased multilateral cooperation on transboundary pollution issues (Caldwell, 1996: 32-47).

3.2 Early International Efforts on Species Protection

In the early 1900s, western countries created the first international institutions on species protections, attempting to ensure controlled harvesting of protected species for local economic and social purposes (Barrett, 2003). That is, protection measures that were taken to protect sets of deteriorating animal populations were linked to issues of human survival and development: in current language, actions were taken to preserve a sustainable yield. One of the first such agreements – the Convention between the United States and other Powers providing for the Preservation and Protection of Fur Seals – was negotiated in 1911 to protect fur seals of the North Pacific for the purpose of securing conditions that would allow long-term continuous hunting for economic gains and prosperity (Hayden, 1942).

Also other international efforts on ecological protection were initiated in the early 1900s. One of the goals of the Internationalen Konferenz für Naturschutz [International Conference on Nature Protection], which was organized on an initiative by the Swiss government, in Bern, in 1913, where delegates from sixteen western countries participated, was to accomplish international regulation for nature protection. These regulatory efforts were directed toward the preservation of threatened species like the musk ox in Greenland and reindeer on Spitzbergen (Frank et al 2000). In addition, the delegates at the Bern meeting resolved to establish an information agency for world-wide nature protection (Conference for the Establishment of the International Union for the Protection of Nature, 1948; Barthelmess, 1972: 121-28; Conwentz, 1914; Nash, 1992: 358; Linnér and Lohm, 1999: 123-27). These plans, however, were postponed nine months later due to the outbreak of World War I.

In the years immediately prior to World War I, European conservation societies developed plans for wildlife protection both in their own countries and their colonies. After World War I, European colonial powers continued to impose species protection measures and created protected areas in their foreign colonies and territories. Minor international agreements were reached on the protection of whales and of African wildlife. Further, the meeting in 1933 of the Convention for the Protection of African Flora and Fauna, which historian Roderick Nash has labeled as the "high point of institutionalized global nature protection before the Second World War," promoted the establishment of national parks and regulations on trade in animal trophies (Nash, 1992: 359). Yet, the Convention failed to acknowledge the close international relationship between human development and species protection in both the North and the South, which become an important topic for international conservation first a decade later. In addition, minor international action was taken shortly before World War II on pollution from shipping (Caldwell, 1996: 235).

3.3 Managing the World's Natural Resources and Geopolitical Security Issues

After the end of World War II, international conservation efforts were expanded to include broader social aspects of natural resource use and management. This expansion of conservation efforts from selected

species protection and the creation of national parks to a more comprehensive focus on natural resource management and conservation, led by a small but growing number of scientists, conservation advocates and policy makers, was prompted by a growing concern about sharp increases in world population and continuing industrialization in an increasing number of countries. Population increases, an accelerated depletion of non-renewable natural resources, and a growing generation of air and water pollution were having important social and economic implications, which resulted in increased attention to the linkage between environment and development issues. Many Western countries, with increasing participation of Eastern and Southern countries, continued to create international institutions for ecological protection and natural resource management. In turn, these institutions promoted increased attention to environment and development issues.

For example, in June 1947, the Swiss League for the Protection of Nature sponsored a conference for conservationists, held in Brunnen, Switzerland. Prominent conservationists from around the world met to confer about how future international nature protection should be organized. Delegates at the meeting believed that a new organization should be created, the International Union for the Protection of Nature (IUPN), which should not be concerned solely with the preservation of wildlife, but address conservation issues in the context of accelerating depletion of natural resources and global population increase. IUPN was formally constituted in Fontainebleau, France, in 1948 (Swiss League for the Protection of Nature, 1947: 15-17; Nash, 1992: 361; Conference for the Establishment of the International Union for the Protection of Nature, 1948).

The Preamble of the Charter of the IUPN stated that human civilizations' dependency upon renewable resources demanded the preservation of the entire world's biotic environment, and IUPN officials and delegates claimed that there were social, educational, cultural and economic reasons for protecting nature (International Union for the Conservation of Nature and Natural Resources, 1974: 17-21). In doing so, IUPN sought to take a much broader approach to natural resources management compared to most existing conservation practices (International Technical Conference on the Protection of Nature. Proceedings and Papers, 1950: vii). Founded by conservationists but welcoming government officials, IUPN worked to became an organization that acted as a link between the scientific community and political institutions (Dalton, 1994: 34). In this respect, IUPN was an early example of a "boundary organization" (Guston et al., 2000), seeking to facilitate the transfer of scientific knowledge to policy makers.

The expansion of the international political focus on natural resources, their management and their connections to human development also reflected a change in world politics, as the Cold War began in the late 1940s. By the middle of the 20th century, modern airplanes, ships and missiles forced national security interests to take a global perspective. In addition, the global expansion of the capitalist economy and international trade resulted in a transition in economic production and its related modes of social and political regulations across countries (Linnér, 2003).

One example of the expansion of national security concerns related to the growing political interest in environment and development issues was the U.S. proposal to hold the United Nations Scientific Conference on the Conservation and Utilization of Resources (UNSCCUR). UNSCCUR was held in 1949 at Lake Success, USA, and included 550 governmentally appointed delegates from 48 countries, together with representatives from several non-governmental organizations and so-called independent experts. UN Secretary-General Tryggve Lie opened the conference by declaring that "Today the United Nations is embarking on a new phase of its program to build the foundations for permanent peace" (United Nations, 1950-51). As reflected in this statement, UNSCCUR's focus on natural resources was directly linked to political development and security concerns.

UNSCCUR originated in a proposal by the United States to the United Nations Economic and Social Council (ECOSOC) in September 1946. U.S. President Harry S. Truman saw the issue of natural resources and their management as strategically important to U.S. foreign and security policy, building on an earlier idea conceived by U.S. President Franklin D. Roosevelt, (Caldwell, 1996: 51). Through the Point Four Program, named after the fourth point in his 1949 inauguration speech, President Truman wanted to make American science and technology accessible to less economically, technically, and scientifically developed countries by providing aid to these "underdeveloped areas" (Truman, 1964: 114-15).

The reason for this proposal strongly reflected Cold War politics and U.S. geopolitical concerns: Truman argued that dire social and economic conditions in developing countries were a hazard not only to themselves and their populations, but also to richer countries, as "underdevelopment" in the least economically, technically, and scientifically developed countries could give rise to social unrest in these countries that could lead to dangerous international political instability in the Cold War system. Truman considered UNSCCUR an important means to promote international stability and U.S. security interests with regard to the developing world (Linnér, 2003: 84-85).

Expressing similar beliefs as those that motivated President Truman to formulate his Point Four program, but for different underlying reasons, the first director of the United Nations Food and Agricultural Organization, Lord John Boyd-Orr, who received the Nobel Peace Prize in 1949, stressed that the world by the mid-20th century had become so small that the only hope for human survival was to initiate extensive global cooperation and action to abolish poverty. He argued that countries shared a responsibility to work together to raise the standard of living among people in the least economically and technically developed countries (Boyd-Orr, 1953; Linnér, 2003).

When the United States presented the UNSCCUR conference proposal to ECOSOC, the Cold War was just beginning. One year before the conference, Andrei Gromyko, then Deputy Minister of Foreign Affairs and Soviet representative to the United Nations, announced that the Soviet Union had no objections to make to the preliminary program. Nevertheless, as tensions between the two superpowers escalated, Soviet Union backed out of the conference in the spring of 1949. Czechoslovakia and Yugoslavia were the only Eastern European countries that attended UNSCCUR. In addition, the Guomindang regime in China expressed support for the conference, but did not attend because the then ongoing Chinese civil war (Linnér, 2003: 45).

The notion that the world must be regarded as a unity and that the wise use of the earth's resources must be planned through international cooperation was central at UNSCCUR. The distress in the developing world became an important argument for conservationists by which they could appeal for conservation of the world's natural resources. The well-known American conservationist Fairfield Osborn expressed this notion in his introductory address at UNSCCUR. To Osborn, it was an astonishing fact that the newly-founded United Nations was able to gather scientists from all around the world to confront the rapid deterioration of state of the world's resources. He regarded UNSCCUR as a manifestation of that countries realized "with a new and piercing clarity" that their future prosperity was intimately linked to conditions in countries on the other side of the globe (United Nations, 1950-51).

In a limited way, UNSCCUR became a forum for developing countries to critique industrialized countries for exploiting developing countries as a source for cheap raw material (Linnér, 2003: 48-50). These views, however, largely disappeared in the majority of the reports on new technical means to extract better and more of earth's natural resources. Instead, the more radical conservationists who focused more on global distribution issues were forced to organize an alternative conservation conference, arranged by UNESCO and IUPN. This meeting, the International Technical Conference on the Protection of Nature (ITCPN), included 250 participants from non-governmental organizations in 58 countries, and was held at

same time as UNSCCUR. The conference aimed to develop a worldwide program for the conservation of food resources.

At ITCPN, the General-Secretary of IUPN, Jean-Paul Harroy, promoted a new conceptualization of natural protection. Harroy argued that the time had passed when conservation should be directed merely towards constructing regulations and setting apart nature reserves to safeguard biota for mainly aesthetic reasons. The precarious situation of a rapidly growing world population demanded that conservation should be directed towards the political management of natural resources, according to Harroy (International Technical Conference on the Protection of Nature, 1950).

Many of the issues that were discussed at ITCPN continued to be subject to discussion and research after the meeting, although mounting tensions between East and West slowed down multilateral cooperation on natural resources management. Nevertheless, countries concluded the Convention on Fishing and Conservation of the Living Resources of the High Seas in 1958, seeking to avoid over-fishing.

3.4 Science and Technology for Natural Resource Management and Development

After World War II, there was a growing interest among the leading industrialized countries in the use of science and technology relating to natural resources management and the study of the global biosphere (Clark et al., 2001). Several national research institutions and governmental bodies, inter-governmental organizations, and non-governmental organizations participated in these debates and efforts, collected data, and compiled reports (Strong, 1972).

This intensification of scientific research and technical development took place within the context of East-West competition. As discussed above in connection with Truman's Point Four Program, there were high-level political attempts in the United States and elsewhere to promote and disseminate new science and technology for improved natural resource management to support economic development and address geopolitical security concerns. In part, American and Soviet governments hoped that the new scientific research and technology would give them practical advantages in their competition with each other (Weart, 2003).

Increasing research activities in the 1950s stimulated the creation of large international collaborative research programs on issues relating to the natural environment. This was an area in which there was often east-west cooperation. Following a suggestion by the U.S. scientist Lloyd Berkner, the International Council of Scientific Unions (ICSU) in 1952 proposed a series of global geophysical activities for the period July 1957-December 1958 under the so-called International Geophysical Year (IGY). The IGY was modeled on earlier International Polar Years (1882-83 and 1932-33), and was intended to allow scientists from around the world to take part in a series of coordinated observations of various geophysical phenomena.

The IGY included representatives from 67 countries. IGY activities spanned the globe, using the latest scientific tools. Although much work was carried out in the Arctic and equatorial regions, special attention was given to the Antarctic. IGY Antarctic research on ice depths yielded radically new estimates of the Earth's total ice content, and also contributed to improved meteorological prediction, advances in the theoretical analysis of glaciers, and better understanding of seismological phenomena in the southern hemisphere (Fleagle, 1992). In addition, scientists such as Charles Keeling acted under the IGY to forward the science of climate change and monitoring of carbon dioxide (Weart, 2003).

Another international research program, the International Biological Program (IBP), ran between 1959 and 1974 and involved experts from 58 countries. The IBP included research projects in areas such as the ecology of natural resources, population problems, and nature conservation. One of the IBP's main motives (and also a driving factor behind the launching of the IGY) was to take advantage of technology emerging out of the space race such as remote sensing to look at the well-being of the planet. This new technology gave an opportunity to study global natural processes for the first time (Worthington, 1975; Blair, 1979; Fries, 1984; McIntosh, 1985; Kwa, 1987; Worster, 1994). In 1966, the first photos of Spaceship Earth were taken by the U.S. Lunar Orbiter from the vicinity of the moon (Jasanoff, 2004).

In September 1968, the Intergovernmental Conference of Experts on a Scientific Basis for a Rational Use and Conservation of the Resources of the Biosphere (the so-called Biosphere conference) was held under the auspices of UNESCO (Caldwell, 1996: 53-54). Caldwell has noted that the "twenty years between the resources (1949) and the biosphere (1968) conferences mark as fundamental a change in perceptions of international responsibilities for the global environment as any that have occurred since the establishment of permanent international organizations" (Caldwell, 1996: 53-55). Unlike at UNSCCUR in 1949, recommendations from the Biosphere conference called for comprehensive international and domestic environmental management and stressed that environmental issues were closely connected to societal issues.

The IBP and the Biosphere conference led in part to the Man and the Biosphere (MAB) program, created in 1971 under UNESCO in collaboration with the United Nations Food and Agriculture Organization (FAO), the World Health Organization (WHO), the World Meteorological Organization (WMO) and ICSU. The MAB program is still active as an independent research program. The program stimulates interdisciplinary research and training in natural resource management, and promotes the involvement of science and scientists in policy development on issues relating to biological diversity. In these capacities, the MAB program seeks to promote sustainable development through conservation and wise use of biodiversity.

The 1963 UN Conference on the Application of Science and Technology for the Benefit of the Less-Developed Areas was the first UN attempt to discuss the role of science and technology for development (rather than natural resource management). The conference proposed the transfer of technology from industrialized countries to developing countries so that developing countries could accelerate the transformation of their economies and their social and economic development. The conference also resulted in the creation of several UN bodies for science and technology advice, such as the Committee on Science and Technology for Development under ECOSOC, the Advisory Committee on the Application of Science and Technology for Development, and the Office of Science and Technology within the UN Secretariat (United Nations, 2003: 7-8).

3.5 Growing Attention to Population and Pollution

Two issues increased dramatically in international political importance after World War II and served to put environment and development concerns on the political agenda: population growth and pollution issues. This importance can be seen in the fact that they quickly became central in the emerging environment and development discourse. Many regarded issues of rapid population growth (especially in developing countries) and increasing air and water pollution (mainly in industrialized countries) to warrant the highest level of political attention, both domestically and internationally.

Global population growth became increasingly linked to natural resource management issues, environment issues and development issues after World War II. Roughly outlined, rapid population growth, predominantly in developing countries, was feared to have adverse effects not only on the

environment, but also on the possibilities of development. As developing countries' populations grew, environmental strains would increase, as well as the demand for natural resources – limited natural resources which were needed for economic development in both developing and industrialized countries. To address these issues, the United Nations held major population conferences in Rome in 1954 and in 1964, discussing connections between natural resources, population growth and development, as well as how these issues such be addressed by the international community. Presenting such arguments, Paul Ehrlich's The Population Bomb (1968), which examined risks associated with a quickly accelerating population, gained widespread public and political attention.

Another highly publicized study was produced by the so-called Club of Rome, which attempted to examine the limits to growth in a world with finite resources (Meadows et al., 1972). To that end, they used computer models to predict future conditions and trends based on past and present data. The study looked at five major trends of global concern: (i) accelerating industrialization; (ii) rapid population growth; (iii) widespread malnutrition; (iv) depletion of non-renewable resources; and (v) deteriorating environment. These trends were treated as dynamically interacting and exhibiting exponential growth. Warning about a faith in technology as the single solution, the authors presented three major conclusions from their computer modeling exercise: First if the current growth trend in the five areas continued unchanged, the limits to growth on planet earth would be reached within the next 100 years. Second, it is possible to alter current trends and establish a condition of ecological and economic stability that is sustainable. Third, the sooner efforts begin to reach a condition of ecological and economic stability the greater the chances of success.

Emerging pollution problems, predominantly in industrialized countries, that drew both public and political attention in the 1960s included cases of mercury poisoning in Minamata, Japan (giving name to the so-called Minamata disease); oil pollution around Santa Barbara in California; smog problems in New York; and pollution of the river Rhine. Rachel Carson's best-selling Silent Spring (1962) started much discussion on the growing use of pesticides. International concern about industrial chemicals increased significantly in 1968, when many people in Yusho, Japan, were poisoned after eating rice contaminated with high levels of polychlorinated biphenyls (PCBs) that had leaked from a heat exchanger. The Organization for Economic Cooperation and Development (OECD) was the first international organization to pay serious attention to the environmental and human health impacts of hazardous chemicals, seeking to improve and harmonize domestic technical, scientific, and policy measures among its member states (i.e. industrialized countries) (Downie, Krueger and Selin, 2004).

Marine pollution was another pollution problem that gained multilateral attention and prompted the formulation of pollution prevention treaties. Political cooperation on pollution led to the 1954 International Convention for the Prevention of Pollution of the Sea by Oil. In addition, the First United Nations Conference on the Law of the Sea (UNCLOS) was held in Geneva in 1958. In 1961, the United Nations Economic Commission for Europe, which contained members from both the East and the West, held its first meeting on water pollution.

Both population issues and pollution issues were part of the international environment and development discourse that was developing in the 1960s, partially as a result of scientific and technological advances in the study of ecology and environment. As efforts were made in the United Nations and elsewhere to formulate multilateral responses to the challenges of rapid population growth and pollution, these issues became part of East-West politics and also signaled the emergence of a more marked North-South division. The political dimension of these issues became clear as countries began preparing for the first global meeting on environment and development, the 1972 UN Conference on the Human Environment.

3.6 Summary of Findings

While some of the first species protection measures were taken for aesthetic reasons, several of the early multilateral protection efforts were taken to secure continuing harvesting for the purpose of economic gain and local human development. International debates and protection efforts expanded after WWII to include broader issues of natural resource management, spurred on by scientific and technological progress and geopolitical security concerns. As the more modern environment and development agenda began to take shape in the 1960s, natural resource management and ecological protection became more clearly linked with domestic strives for social and economic development. This policy process was driven by a push for more multilateral cooperation to address these issues, but was also influenced by Cold War considerations and the growing importance of North-South politics and conflicts. Many northern countries focused on population and transboundary pollution issues. In contrast, developing countries attempted to draw attention to their more local social and economic development concerns.

4. United Nations Conference on the Human Environment

In this section, we look at the preparation for, holding of and outcomes of the UN Conference on the Human Environment through our four analytical perspectives to examine how the environment-development story progressed during this era. UNCHE, held in Stockholm in June 1972, is identified by both scholars and practitioners as a central catalyst for bringing international political attention to environmental issues (Rowland, 1973; Tolba et al., 1992; Åström, 1992; Caldwell, 1996; Meyer et al., 1997; Elliott, 1998; Frank et al., 2000; Strong, 2001; Haas, 2001). The Stockholm Conference moreover stimulated international environmental protection measures, encouraged social mobilization on environmental issues and shaped the international environmental political discourse. In addition, the Stockholm Conference was an important conveyer of ideas relating to the linkage between environment and development with its specific focus on the human environment. That is, much political and policy focus was on ways in which environmental issues related to human social and economic conditions and development concerns.

The preparations for and holding of the Stockholm Conference were underpinned by a growing political, scientific and public concern for a host of ecological and development issues, such as air and water pollution, population growth, urbanization and rural development. The conference was intended to formulate a common platform for all countries and to strengthen the international institutional framework for policy making on issues relating to the human environment. In the global politics on these issues, the influence of international organizations within and outside UN system grew, and they played significant roles in preparing for the conference and in shaping its outcomes. There was little conflict between East and West that specifically related to the issues that were discussed at Stockholm Conference. The East-West conflicts that existed were of a general political Cold War nature, rather than on the environment and development issues that were addressed at Stockholm.

Instead, what emerges as the most important political conflict on environment and development issues during the preparations for and holding of the Stockholm Conference is the growing North-South divide over responsibility and obligations (i.e. who had done what, who should do what and who should pay for what). Many of the persisting points of conflict on environment and development between industrialized and developing countries, for example between transnational pollution concerns and local development issues, showed themselves politically in global context for the first time in the era of the Stockholm Conference. In this respect, the preparations for the Stockholm Conference became an important global political platform for voicing universalizing and differentiating views on environment and development, which became a central part of the environment and development debate before and at Stockholm.

4.1. The Environment and Development Discourse at Stockholm

By the early 1970s, an environmental discourse was established, and there was public pressure in many industrialized countries for environmental political action: "Throughout most of the industrialized world, just as it had once been impossible to deliver a political speech without referring to God, it was now unthinkable to neglect a mention of ecology" (Rowland, 1973: 34-35). In his 1970 report on the environment, UN Secretary-General U Thant discussed a number of environmental issues that he believed were in need of immediate UN attention (Rowland, 1973: 29-30). These included increases in atmospheric carbon dioxide, increased generation of both household wastes and hazardous wastes, disposal of low-level radioactive wastes, growing industrial generation of air and water pollution, the damaging effects of soil erosion and salinization, deforestation, the extinction and endangerment of species, a growing world population, and rapid industrialization.

Many of the environment issues that were debated had clear connections to development concerns that were frequently noted in the discourse. The major environment and development issues that had dominated much of the debate in the 1960s (e.g. natural resource use and management, population growth and pollution) continued to receive much attention in the early 1970s and shaped the agenda of the Stockholm Conference. In addition, it was witnessed in the early 1970s that development projects, such as the building of large dams or extensive use of pesticides for growing crops could, in fact, cause "ecological boomerangs" and have severe, often unanticipated environmental consequences (Bäckstrand, 1971: 3 and 18). As a result, it was discussed at Stockholm and elsewhere how ecological aspects could be better integrated in the design and implementation of development projects (Bäckstrand, 1971; Rambach, 1972; Rowland, 1973).

Much of the environment and development discourse around the time of the Stockholm Conference displayed a growing tension between universalizing and differentiating views. The universalizing perspective that was articulated by many industrialized countries argued that the increasing importance of transboundary environmental issues created a need for intensified multilateral action based on common interests and goals (Country Reports to UNCHE; Engfeldt, 1973). International political efforts in the late 1960s and early 1970s often attempted to reinforce this view and formulate universal responsibilities. As signs of this, the Stockholm Conference was organized around the theme of *Only one Earth* and the Stockholm Declaration called for *a common outlook* and laid down *common principles* for policy action, as specified in, for example, the Stockholm Action Plan.

In contrast, the growing number of independent developing countries voiced a more differentiating view of environment and development issues. Claiming that most pollution was caused by industrialized countries and consequently their responsibility, developing countries argued that most of their environmental problems were related to local development issues such as limited access to clean drinking water, land and soil erosion, and inadequate housing standards (Country Reports to UNCHE). As such, they called for more human and financial aid from industrialized countries to address these issues, which, it was argued, would improve the ability for more effective environmental management (Rambach, 1972; Campbell, 1973: 147-148). In addition, influential developing countries strongly argued for changes in international investment and trade conditions to enhance conditions for social and economic development in their countries (Rambach, 1972; Rowland, 1973).

4.2 Institutional Preparations

The organizing of UNCHE involved an extensive number of UN agencies, other inter-governmental organizations, governments, and non-governmental organizations, which engaged in debate and policy planning. The idea of UNCHE began as a Swedish initiative. The Swedish proposal was motivated by a desire to gain global recognition of the environment as an important transnational issue. However, it was also hoped that the inherent cross-sectoral character of environmental issues could help tear down counterproductive barriers within the sectorally rigid UN system, as well as serve to strengthen a United Nations that was plagued by tensions between East and West and grappling with the complications of decolonization (Interviews, Sverker Åström, June, 2001 and Lars-Göran Engfeldt, August, 2001).

Sweden proposed to the UN Secretary-General U Thant on May 20, 1968 that the UN Economic and Social Council (ECOSOC) should include the issue of a global environmental conference on the agenda of its summer session. In addition, the Swedish UN mission sent an "explanatory memorandum" to U Thant outlining why the UN should organize such a conference (Åström, 1968). The memorandum called attention to ecological issues. It stated that "problems of human environment" should be understood both as human influence on the natural environment (e.g. creation of air and water pollution, wastes and soil

erosion) and the influence of natural surroundings on human health and living conditions (e.g. expansion of shantytowns, urbanization and rising crime levels). The memorandum recognized existing efforts by the WHO, FAO and UNESCO to address some of these issues, but it was argued that it was time to give them more prominence within the UN system.

Based on an ECOSOC resolution and discussions in the UN General Assembly, UN member countries on December 3, 1968 decided unanimously to hold a UN Conference on the Human Environment. Caldwell (1996: 58) has described this resolution as a "conceptual milestone in the history of the relationship between humans and their environment." The purpose of the conference was to be three-fold: i) to direct the attention of governments and the public to the importance and urgent character of environmental problems; ii) to identify aspects of these problems that could only or most suitably be solved through international cooperation; and iii) to give ongoing and planned activities a common basis and direction (Jordbruksdepartementet, 1972: 6-7). The General Assembly decided in December 1969 that the conference would be held in Stockholm. The conference was not given formal decision-making powers, and decisions on all outcomes of the conference had to be formally taken by the UN General Assembly during its fall session after the conference.

The General Assembly gave responsibility for the conference preparations to the Secretary-General. To assist the Secretary-General with the preparations, the General Assembly set up a small preparatory committee that consisted of 27 member states. The preparatory committee held four two-week meetings in New York and Geneva between March 1970 and March 1972. Many UN states and intergovernmental organizations that were not formal members of the preparatory committee attended meetings as observers. At its meetings, the Preparatory Committee planned the conference agenda and discussed possible outcomes of the Stockholm Conference. To assist the Secretary-General and the preparatory committee with the practical preparations for the conference, a small conference secretariat was set up in Geneva. In December 1970, the UN General Assembly appointed Maurice Strong UN Undersecretary-General for environmental affairs, and gave him responsibility for the secretariat (Strong, 2001: 121; Interview, Maurice Strong, January, 2002).

During the preparations, several UN agencies such as WHO, FAO, UNESCO and the World Bank and the UN Industrial Development Organization (UNIDO) were actively involved and worked to bring their issues onto the agenda (Bäckstrand, 1971). In addition, non-governmental organizations such as ICSU and IUCN sought to shape the conference agenda (Caldwell, 1996: 60-61). Many (primarily industrialized) countries also held domestic meetings with non-governmental groups as part of the conference preparations.

The conference preparations were structured around three levels based on the UN General Assembly's stated goals for the conference (Bäckstrand, 1971: 9; Engfeldt, 1973: 398-399). Organized out of the conference secretariat in Geneva, efforts on the first level focused on developing an intellectual and conceptual background for the conference. Such efforts sought to rally support for the recognition of the human environment as an important issue for the UN, and to create legitimacy for the Stockholm Conference. This included a review of existing knowledge on the relationship between human societies and the environment. As part of this exercise, Strong commissioned the book Only One Earth, which was written by René Dubos and Barbara Ward together with 152 international experts (Dubos and Ward, 1972; Interview, Maurice Strong, January, 2002).

The conference secretariat also invited countries to submit national environmental reports. The compilation of these reports was intended to generate knowledge about the state of the environment, and to help set the conference agenda. More than 80 industrialized and developing countries submitted national reports to the conference secretariat in 1971-72 (Strong, 1973: 694). Countries also submitted 35 case studies on specific environmental problems. These country reports were in some cases the first time

countries conducted extensive studies of their domestic environmental situations. UN specialized agencies and non-governmental organizations also submitted reports on specific issues and aided in the selection of topics for consideration at the conference and in its planned outcomes.

Actions on the second level involved producing background documents and drafting a conference declaration and an action plan. The preparatory committee and the conference secretariat drafted recommendations to cover three major sets of issues: i) urbanization and human settlements; ii) rational natural resource management; and iii) pollutants of wider international concern. The recommendations were based on specific issues and concerns that had been identified in the submitted national reports, as well as issues discussed in the preparatory committee and other working groups. Draft recommendations in all three areas sought to stimulate both increased technical and scientific cooperation and political action.

Related to the drafting of an action plan containing recommendations for future action, the third level of activities included efforts to stimulate the creation of concrete conventions and other types of agreements that could be adopted at the Stockholm Conference. The preparatory committee targeted five areas for immediate action: i) a declaration on the human environment; ii) issues concerning monitoring of marine environments; iii) marine pollution; iv) erosion and other types of soil degradation; and v) nature management such as managing the import and export of protected animals and plants. Individual working groups connected to the conference secretariat explored these areas further.

Even though most countries participated in the preparatory work, many countries were wary about conceding sovereignty. A group of Western countries that included France, the United Kingdom, the United States, West Germany, Italy, Belgium and the Netherlands expressed concerns that the Stockholm Conference could lead to trade restrictive environmental regulations. They also resisted the idea of giving up sovereignty through the creation of a powerful UN environment organization (Anonymous, 2002). Moreover, newly independent developing countries, such as India, Brazil and Algeria acted to ensure their right to sovereign decision making was not eroded by any of the conference outcomes (Åström, 1972; Engfeldt, 1973).

In addition, the conference preparations suffered from political tensions between blocs of countries. As the principal organizer of the conference, Maurice Strong quickly discovered that the preparations for the Stockholm Conference "were marred and almost derailed by East-West and North-South conflicts" (Strong, 2001: 121).

4.3 Power Politics and East-West Issues

After the Cuban missile crisis in 1962, both East and West had made efforts at détente. Cold War relations were better in the late 1960s than they had been either a decade earlier or at UNSCCUR in 1949. Ecological and environmental issues were one area in which the two superpowers attempted to improve relations.

The United States, which had been a driving force in previous international efforts on resource management, was largely supportive of the Swedish conference proposal (Strong, 2001). Many U.S. government officials and politicians saw U.S. support of the conference as a logical continuation of earlier U.S. policy on international resource and security issues. In short, those concerned with resource security forecasted the following possible causal chain of events: Resource exhaustion in a developing country, either by overpopulation or over-exploitation, could cause vast domestic poverty and hunger. Out of such despair, social unrest could lead to domestic political instability, which could make the country vulnerable to extremist insurrection. Such an insurrection could upset central geopolitical and economic

interests of the United States and its allies. In the end, these events could lead to a shift in the balance of power in the Cold War order (Linnér, 2003: 36, 83-88, 101-102). In addition, the United States called for international cooperation on pollution issues.

Initially, the Soviet Union and other members of the Eastern bloc joined the United States in support of the Swedish initiative (Engfeldt, 1973: 396-397). Soviet Union had presented an extensive national report at the Biosphere conference in September 1968 and strongly supported the creation of the MAB program (Bäckstrand, 1970). The Soviet Union also declared in the UN General Assembly in the fall of 1968 that environmental problems, although mostly national in character, required international cooperation. In addition, Soviet and U.S. representatives called for specific East-West cooperation on environmental issues. During a speech in June 1968, U.S. President Lyndon B. Johnson urged cooperation with the Soviet Union on environmental issues. One month later, the Russian intellectual A. D. Sakharov published an essay in which he argued for Soviet-American cooperation to address issues relating to global environmental pollution and deterioration (Caldwell, 1996: 57).

Countries from both East and West participated actively in the first meetings of the preparatory committee and had representatives working at the conference secretariat. Yet, Cold War politics still cast its shadow over the conference preparations. East-West differences, however, were not primarily related to the conference or the specific issues under consideration for the conference. In fact, national reports from several East-bloc countries admitted the existence of domestic environmental problems similar to those visible in western countries, and thus constituted an early and rather surprising admission of environmental problems. Instead, East-West tensions were of a more general political nature and concerned the participation of East Germany.

Led by the United States, Western countries insisted that the Stockholm Conference would only be open to members of the UN or any of its specialized agencies (according to the so-called "Vienna formula"). This meant that East Germany would be excluded from the Stockholm Conference, as it was neither an UN member nor a member of any UN specialized agency. In contrast, West Germany, as a member of UNESCO and WHO, could attend the conference. Members of the East-bloc argued that that the environment was a global issue that transcended state borders, and that all countries should be part of the conference, including East Germany. In December 1971, however, the UN General Assembly decided in a 104-9 vote that the Stockholm Conference would be open only to members of the UN or any of its specialized agencies (Rowland, 1973: 41).

Despite efforts to find a last-minute compromise between East and West (Strong, 2001: 121-123), Soviet Union and most members of the East-bloc decided to boycott the conference over the East Germany issue. This boycott affected, but did not seriously damage, the Stockholm Conference. The Soviet Union and other members of the East-bloc had had national experts working in the conference secretariat and had participated actively in the conference preparations. Maurice Strong, in his capacity as Secretary-General of the Stockholm Conference, was in daily contact with Soviet embassy personnel (and often the Soviet ambassador directly) in Stockholm during the conference, informing the Soviets and bringing back Soviet reactions on debates and decisions at the conference (Interview, Maurice Strong, January, 2002; Rowland, 1973: 47; Strong, 2001: 123). There was also an opportunity for the Soviet Union and other members of the East-bloc to address the outcomes of the Stockholm Conference, as these were discussed and formally adopted in the UN General Assembly in the fall of 1972.

Although most communist countries did not come to Stockholm, the conference was mainland China's first appearance at a major UN meeting. China had taken over the UN seat from Taiwan only a few months earlier. Though Chinese speeches and interventions were filled with communist rhetoric, China did not predominantly seek to emphasize East-West difference, but generally sided with developing countries in their attacks and demands on the industrialized countries (Campbell, 1973: 150-152).

4.4 North-South Relations and Conflicts

Although East-West tension cast a shadow over the final stage of the conference preparations and the conference itself, conflicts between the global North and the global South posed an ever greater challenge (Strong, 2001: 123-130). This conflict, which was visible in the discursive tension between universalizing and differentiating arguments, concerned which issues that should be prioritized and the financial and political responsibilities of industrialized and developing countries.

UN General Assembly Resolution 2398 from December 3, 1968 emphasized that addressing the problems of the human environment was essential for sound economic and social development in industrialized and developing countries alike. The resolution also stated that scientific and technological developments should be made available for developing countries through international cooperation: "Expressing the strong hope that the developing countries, though appropriate international co-operation, derive particular benefit from the mobilization of knowledge and experience about the problems of the human environment, enabling them, inter alia, to forestall the occurrence of many such problems." In reality, however, the resolution did not state anything more than UNSCCUR had almost two decades earlier, and many developing countries were highly skeptical that the promises of the new General Assembly resolution would actually be put into real action.

Many of the growing number of independent developing countries argued that many environmental problems, for example those relating to air and water pollution, were predominantly caused by the global North, and that the costs for abating them should consequently be born by the global North. Moreover, several developing countries, such as Brazil, India and Algeria, expressed trepidation that a global environmental conference would turn out to be "a rich man's show" (Engfeldt, 1973: 401-402; Personal interviews, Sverker Åström, Stockholm, June 2001; Lars-Göran Engfeldt, Stockholm, August 2001). They also argued strongly for "additionality" -- that international resources spent on the environment should be additional to those resources already identified for the development assistance target of one percent of GNP in the UN Second Development Decade. That is, developing countries argued that any funding relating to environmental issues should not infringe on development funding (Campbell, 1973: 147-148).

Developing countries also criticized industrialized countries for only promoting their own interests as they advocated concerted actions on environmental issues. For example, Brazil accused industrialized countries of using environmental issues to direct UN attention away from the more urgent issues of promoting peace and providing aid to the poorest countries (Bäckstrand, 1971: 16; Campbell, 1973). Brazil and India, among others, stressed that new-found environmental concerns of the global North should not be used as an excuse to impose development restrictions on the South, which should be given the same opportunity for economic growth as the global North had already enjoyed.

Developing countries, in speeches and their national reports to the conference secretariat, stressed environmental problems relating to local land use, drinking water issues and urbanization (Country Reports to UNCHE). They emphasized how such issues were intimately tied to issues relating to development and poverty eradication. Such arguments were often followed by calls from developing countries for increased transfer of financial and technical resources from the global North to the global South.

In contrast, industrialized countries such as Canada, the Netherlands, Sweden, and the United States, argued from a universalizing perspective that the origins of environmental problems were fundamentally the same in all countries irrespective of level of industrialization or economic system (Engfeldt, 1973:

402). They proposed that it was, in fact, the poorest countries who stood to gain the most from environmental protection and improvement, and that the UN was the best forum for developing countries to make their voices heard. International cooperation could help developing countries to address domestic problems such as loss of wildlife, soil deterioration, water pollution and uncontrolled urbanization. Cooperation could also help developing countries to avoid many of the costly mistakes of industrialization made earlier by industrialized countries.

An important part of the preparatory efforts to find common ground between the global North and global South was a panel of 27 experts that gathered in a small mountain village called Founex in Switzerland, from June 4-12, 1971. The Founex panel tried to develop a conceptual platform to bridge the gap between developing and industrialized countries in their attitudes towards environment and development (Campbell, 1973: 139-141). The panel included several influential academics from the developing world. The Founex meeting resulted in the first comprehensive UN document on development and environment issues: The Founex Report on Development and Environment (Rambach, 1972). Adil Najam (2004: 231) has described the thirty pages long Founex report as "one of the most authentic enunciations of the South's collective interests on issues of environment and development." The Founex discussions and findings were followed up by a series of regional meetings in Bangkok, Addis Ababa, Mexico City and Beirut between August and October 1971, where regional experts and environmental administrators sought to build a common ground across regions.

In order to try to find common ground between developing and industrialized countries, the Founex meeting sought to develop an approach that included both the pollution concerns of the North and the development concerns of the South. As such, the meeting worked to combine ideas from both universalizing and differentiating perspectives on environment and development. The Founex report enforced the idea that industrial growth, even at the cost of some environmental degradation, is good for the environment in the long run. The Founex group strongly believed that continued development was "the only answer to many of the environmental problems" of developing countries. However, developing countries could not afford to neglect environmental problems and regard nature as a free resource. Economic and social planning had to be integrated with environmental considerations (Rambach, 1972: 22).

The Founex group hoped that a growing global concern for the environment could lead to an increased willingness to fight poverty: "An emerging understanding of the indivisibly of the earth's natural systems on the part of the rich nations could help strengthen the view of a human family, and even encourage an increase in aid to poor nations' efforts to improve and protect their part the global household" (Rambach, 1972: 31). Related to these financing issues, the Founex group discussed the need for creating a fund that would finance environmental efforts in developing countries, and supported this idea.

At the same time, the Founex group expressed fears that the introduction of "rigorous environmental standards" for the manufacturing of products by industrialized countries could give rise to "neo-protectionism." The group argued that consumer concerns should be limited to the environmental effects of the products themselves and their use: "When the concern spreads from the quality of a product to the environment in which such a product was produced, the alarm bells should ring all over the world, for it would be the beginning of the worst form of protectionism" (Rambach, 1972: 31).

The trade related concern of the Founex group were supported by the fact the international trade liberalization invoked by the General Agreement on Tariffs and Trade (GATT) had often favored industrialized countries. Through the sixth round of tariff-cutting negotiations during twenty years between 1947 and 1967, the South had gained limited access to markets in the North. Developing countries argued that trade protection measures in industrialized countries through quota restrictions, tariff structures, price supports, and health and safety regulations, among others, considerably reduced

developing countries' exports to these countries, most significantly exports of agricultural goods. These claims were supported by many economists (Johnson, 1967: ch. 3; Hansen, 1975: 927). The Founex group hoped that the Stockholm Conference would emphasize that industrialized countries should not insist on unrealistic environmental standards when assessing development projects.

In addition, the Founex group particularly considered one major issue at length: the "opportunity" for replacing polluting industries from the North to the South. The Founex group predicted that enforcement of more rigorous environmental standards in developed countries would raise the cost of production in these countries. This would, according to the Founex group, open up an opportunity for the poorer countries to attract these industries. These industries, they argued, would not be too polluting in a developing country that did not have so much environmental pollution already. While it was believed that such re-location had to be done with some sensitivity, the group dismissed objections that it would be morally wrong to export polluting industries to developing countries as "extreme" (Rambach, 1972: 32).

4.5 The Debate at Stockholm and North-South Dimensions

Of 132 UN member states, 113 attended the Stockholm Conference. The conference preparations, including official speeches in the UN and the national reports submitted to the conference secretariat, had shown that industrialized countries and developing countries had widely differing conceptualizations of what the most pressing environmental issues were, and how they should be addressed. The discussions at the conference were largely an extension of the earlier debate between the global North and the global South. Many industrialized countries continued to voice universalizing views and stressed the need for multilateral measures to protect the biosphere, improve multilateral pollution control, and conserve resources. In contrast, developing countries maintained their differentiating perspective and continued to argue strongly that improved social and economic development in developing countries was the central issue, and that they should be given special considerations by industrialized countries to achieve this.

The national reports prepared by a host of developing countries such as Afghanistan, Kenya, Swaziland, Iran, Turkey, the Philippines and Burma showed that that these countries struggled with difficult domestic problems relating to soil degradation and erosion, overgrazing and local (mainly urban) pollution, and that these problems would require domestic action. As stated in the beginning of the Philippine report: "Like leprosy in an advanced stage, the deterioration of [the Philippine] living environment can no longer be ignored" (Rowland, 1973: 65). Yet, many developing countries continued to argue at the conference that economic and social development must come before environmental protection in developing countries, as their environmental problems were seen to primarily originate in problems of poverty, malnutrition and unemployment (Jordbruksdepartementet, 1972: 9). These countries argued that the only way for them to deal with emerging domestic environmental problems was through accelerated industrial and economic growth (Rowland, 1973: 50).

The unwillingness of developing countries to prioritize environmental issues was criticized by northern industrialized countries, who claimed that the environment was an issue of global concern that all countries needed to address together. Trying to overcome these differences, several delegates and speakers referred to the conclusions of the Founex report that environmental protection and economic development were not in an inherent conflict with each other. For example, Maurice Strong stated in his opening speech that an economy without growth could not be a realistic political goal for any society, but that it was necessary to develop new economic terms and critically scrutinize the traditional aims of economic development (Jordbruksdepartementet, 1972: 6).

Similar arguments were presented by several inter-governmental organizations such as the World Bank and UNIDO (Rowland, 1973: 66-72). The World Bank had been created to assist in the rebuilding of

Western Europe after WWII, but by 1972, it was mainly focusing on developing country projects. The President of the World Bank, former U.S. Secretary of Defense, Robert McNamara, forcefully stressed at Stockholm that improved environmental protection and management would not be possible without continued economic growth in both industrialized and developing countries. The World Bank reasoned that an increasing wealth in developed countries would inevitably trickle down to the poorest nations through trade and investments and help them raise their standard of living.

UNIDO argued in a report that continued industrialization was crucial for dealing both with poverty and "underdevelopment," and that this could be done without seriously damaging the environment through careful planning and management. Many proposed means for achieving this were based on a crude end-of-pipe thinking: Industries should be located away from large cities and placed so that prevailing winds carried pollutants away from neighboring cities, or outlets of raw sewage from cities should be extended further away from populated areas. The UNIDO report also repeated the conclusion in the Founex report that the fact that developing countries in general had put less stress on their domestic environmental resources than industrialized countries could work to their advantage in future location of industrial activities.

Developing countries were seen by UNIDO to be in need of several basic industries such as petroleum, chemicals, metal extracting and processing, and pulp and paper industries that would help developing countries generate employment and productivity. Because developing countries could "afford less stringent environmental standards," they would often have a basic economic comparative advantage in the establishment of basic industries over industrialized countries that to a higher degree polluted their domestic environment. There were some warnings raised, however. Ghana, among others, warned developing countries to not take too much of what developed countries did not want and sought to make sure that industrialized countries or multilateral companies did not "dump" heavily polluting industries in developing countries (Rowland, 1973: 71).

While most of the discussion of these issues at the Stockholm Conference centered on ways of stimulating economic growth while meeting environmental goals, some raised the issue of a need for assessing the long-term viability of current levels of production and consumption. L. Sico Mansholt, President of the European Economic Commission, declared in a speech to plenary:

> The organs of the U.N. are going to specify exactly what standard of living this 75 percent of the world population [who are living on lower economic standards than people in the west] can actually reach, taking into account the limits of resources and energy and the equilibrium of the ecosphere. And if we are to be sincere in our promise to close the gap between the rich and poor nations we must be ready to accept the consequences for our own rate of growth and its direction. Thus it is time to ask: Are our present social structures and production methods defensible? (Rowland, 1973: 75)

This reasoning questioned whether the economic "trickle down" effect from developed to developing countries was actually working, and whether developing countries could increase their standards of living by themselves in the current international economic and trade system, or if a substantial net transfer of resources and wealth from developed to developing countries was needed. Further, the richer developed countries were more likely to be able to find the necessary means to deal with and abate environmental problems than the poorer developing countries, especially if more polluting and dangerous industrial activities migrated to developing countries. As such, developing countries were vulnerable to ecological catastrophes, sometimes even more so than the richer, more technically advanced countries.

India's Prime Minister Indira Gandhi held industrialized countries responsible for many of the problems plaguing developing countries:

> Many of the advanced countries of today have reached their present affluence by their domination over other races and countries, the exploitation of their own masses and own natural resources. They got a head start through sheer ruthlessness, undisturbed by feelings of compassion or by abstract theories of freedom, equality, or justice. (Science and Public Affairs: Bulletin of the Atomic Sciences, 1972: 36)

Global equality issues were also addressed by representatives of industrialized countries. In his opening speech, Maurice Strong stressed the importance of a more equal distribution of material resources between rich and poor countries (Jordbruksdepartementet, 1972: 5). The Swedish Prime Minister, Olof Palme, raised the issue of international environmental justice in his address to the conference. In his declaration of the Swedish policy, he asserted that the Swedish government attached the greatest importance to the need for accelerated development in many developing countries. Palme declared that it was an inescapable fact that each individual in the industrialized countries drew, on the average, thirty times more heavily on the limited natural resources of the earth than his fellow humans in developing countries. Palme concluded that these facts raised the question of the need for more equal distributions both between countries and within countries (Palme, 1972: 48-53).

On trade, the debate in Stockholm echoed many of the thoughts had had been presented in the Founex report. Developing countries repeatedly argued that environmental concerns must not be used as an excuse for protecting domestic industries in developed countries against cheaper imports from developing countries. Also, increased recycling of raw materials in industrialized countries would lower the volume of primary commodities imported into developed countries from developing countries. Many Latin American countries moreover expressed concerns that actions by North American and European multinational companies were a new form of economic imperialism, depriving Latin American countries full control over their domestic resources and the possibility of reaping the full gains of these resources (Rowland, 1973: 53).

Another issue that continued to be highly controversial was the notion of "additionality" (Campbell, 1973: 147-148; Caldwell, 1996: 73-74, 77). Almost all developing countries strongly argued that environmental measures in the industrialized countries should not be used as a reason to reduce aid to the developing countries. On the contrary, they argued that industrialized countries should instead increase available financial resources to the developing countries to cover their increased costs related to environmental measures. In this respect, several developing countries actively sought to use the Stockholm Conference as a means to increase their received foreign aid (Rowland, 1973: 63). Industrialized countries, however, argued strongly against the idea of a new special aid fund on the basis that environmental considerations should be a natural element of planning aid projects.

4.6 Outcomes of the Stockholm Conference

The Stockholm Conference produced three major sets of decisions based on work during the preparations for the conference and deliberations at the conference. These decisions were marked by North-South conflicts and compromises on environment and development. The first decision was the Declaration of the United Nations Conference on the Human Environment (the Stockholm Declaration), which consisted of a Preamble and 26 Principles. The Declaration outlined major principles for multilateral cooperation on environment and development.

The second major decision was the adoption of the Stockholm Action Plan, which was intended to supplement the Stockholm Declaration. The Action Plan was made up of 109 more specific Recommendations for governments and international organizations on international measures against environmental degradation and promoting development based on the more general principle outlined in the Stockholm Declaration. Most of the numbered Recommendations consisted of several parts, so the total number of actual individual recommendations was much larger than 109.

The third set of decisions that came out of the Stockholm Conference was a group of five issue-specific resolutions. The five resolutions called for: i) a ban on nuclear weapons tests that could lead to radioactive fall-out; ii) the creation of an international databank on environmental data; iii) the initiation of actions linked to development and environment; iv) international organizational changes proposing the creation of he United Nations Environment Progamme (UNEP); and v) the creation of an environmental fund.

The UN General Assembly discussed all the outcomes of the Stockholm Conference in late December 1972, and gave final approval to the decisions taken at Stockholm. During the General Assembly meeting, countries adopted the Stockholm Action Plan virtually without changes (United Nations General Assembly, 1972: 1-18). The Stockholm Declaration was also accepted, but only after some controversy on issues relating to consultation and compensation in cases of transboundary environmental problems.

4.7 Summary of Findings

The Stockholm Conference with its focus on the human environment was designed to address a range of environment and development issues that were central to the discourse at the time. Organized within the United Nations with the help of a multitude of international organizations, hopes were expressed that the Stockholm Conference could create a global platform for effective decision making and implementation. The conference was planned in an atmosphere of East-West détente, but Cold War conflict over the participation of East Germany led to a boycott by most members of the East bloc. Instead, growing North-South conflicts became the largest obstacle, and the Stockholm Conference became an important venue for voicing universalizing and differentiating views on environment and development. Whereas industrialized countries gave voice to a universalizing view and stressed the need for all countries to address transboundary environmental issues, developing countries presented a differentiating view and insisted that more attention should be given to local social and economic concerns in developing countries such as better access to clean drinking water, enough food for all, improving health situations, promoting rural development, and addressing negative consequences of rapid urbanization.

5. Continuing Efforts on Environment and Development, 1972-1982

The growing international and domestic focus on the relationship between environment and development issues in the late 1960s and early 1970s marked the beginning of a more widespread political and public attention to these issues and their linkages. In this section, we apply our four analytical perspectives to examine how environment and development issues were addressed in the decade after the Stockholm Conference, such efforts often building on past conceptual and institutional developments.

The Stockholm Conference became a first global political platform for countries and international organizations to debate environment and development issues. The preparations for the conference, in particular the Founex meeting, and the discussions at the conference linked several important environment and development. This resulted in intensified multilateral cooperation and several international institutional changes. The Stockholm Declaration and the Stockholm Action Plan confirmed existing responsibilities and outlined new ones for governments. International environmental hard law and soft law were expanded, existing organizations were given new tasks, and a new environment agency was created (UNEP).

Yet, the Stockholm Conference revealed significant disagreements among countries regarding which issues should be prioritized and countries' economic and political responsibilities. Some of these were in the context of bi-polar East-West politics, as superpower relations grew colder in the 1970s. More important, however, was the continuing controversy between industrialized countries (and their universalizing perspective) and developing countries (and their differentiating perspective). The inability to overcome these controversies often prevented any meaningful international progress on intersecting environment and development issues. In fact, the decade after the Stockholm Conference further polarized the North-South relationship over environment and development and related prioritizing of issues, the handling of issues, and financial and political responsibilities.

5.1 The Environment and Development Discourse Develops

By the early 1970s, there was an established and developing international discourse on environment and development issues, including their relationship and how they should be handled. Events such as the Founex meeting and the Stockholm Conference had explored conceptual and practical linkages between environment and development issues relating to countries' desires for social and economic development. Policy makers and experts frequently argued that it was necessary always to address environment and development dimensions together across issue areas, which was a significant change to earlier debates that had a much more narrow focus on ecological and development issues. Multilateral documents such as the Stockholm Declaration and the Stockholm Action Plan assigned governments a clear responsibility to consider both ecological and development aspects in all planning and policy activities.

The tension between universalizing and differentiating views was not solved at Stockholm, and the struggle between them continued to shape the environment and development discourse post-Stockholm. Drawing on universalizing principles, consensus emerged among countries on the management of some (mainly environmental) issues. Often pushed by smaller industrialized countries, political negotiations resulted in the creation of international environmental agreements and programs and related domestic changes in regulations and behavior in the 1970s and early 1980s. Such examples include North American and European efforts to address acidifying substances and cases of regional seas pollution abatement. Several of these mainly environment related activities were actively supported by recently created organizations, most notably UNEP (Caldwell, 1996). In addition, countries and international

organizations continued to work to incorporate aspects of human development in conservation programs (Caldwell, 1996; Holdgate, 1999).

However, the debate and efforts on multilateral cooperation and policy making on many of the more development oriented issues that were pushed primarily by developing countries at the Stockholm Conference were much more troublesome, despite the fact that industrialized and developing countries pledged to work together on achieving ecologically sound development globally. Nevertheless, developing countries continued to voice differentiating views and focus attention to their domestic and local development issues and call for increased assistance from industrialized countries. Issues of development and environment in the global South were explored by international organizations and commissions and at symposiums. They were moreover integrated in efforts by developing countries on a New International Economic Order for investment and trade between North and South (Cox, 1979; Keohane and Nye, 1977).

5.2 Institutional Changes on Environment and Development

In the early 1970s, new international legal principles and codes of conduct were established, and organizational changes were initiated. Based on recognition of the need for more multilateral technical, scientific and political cooperation on environment and development issues, governments established several important international legal principles and codes of conduct through the Stockholm Declaration. In this capacity, the Stockholm Conference has been described as a watershed event in international environmental law (Kiss and Shelton, 1993: 11). These new legal principles and codes of conduct underpinned much international debate and law-making in the years after the Stockholm Conference. However, the Stockholm Declaration also bears the mark of the struggle to accommodate diverging interests of developing and industrialized countries regarding preferred action on social and economic development and environmental protection.

The Preamble of the Stockholm Declaration proclaimed that the "protection and improvement of the human environment" is the duty of all governments. Local and national governments are identified as having the greatest responsibility regarding environmental protection, but the Preamble also recognized a growing need for international cooperation on environmental issues. The Preamble identified a number of urgent strains on the human environment, including high levels of air and water pollution, major disturbances to the ecological balance of the biosphere, the depletion of irreplaceable resources, and continued population growth. Environmental problems in developed countries are recognized to generally be related to "industrialization and technological development," while most environmental problems in developing countries are seen to be caused by "under-development." As such, the Preamble argued that developing countries should prioritize development, while bearing in mind "the need to safeguard and improve the environment."

Principle 1 of the Declaration spelled out that a human environment that permits a life of dignity and well-being is a basic human right. This was the first time ever that the connection between human rights and safe environmental conditions was made in a multilateral political declaration (Kiss, 1994). Principle 1 also set out an inter-generational responsibility for states "to protect and improve the environment for present and future generations." To that end, "policies promoting or perpetuating apartheid, racial segregation, discrimination, colonial and other forms of oppression and foreign domination stand condemned and must be eliminated." Principle 5 outlined two goals regarding non-renewable resources: such resources should both be used in such a way "as to guard against the danger of their future exhaustion" and in ways that their benefits are "shared by all mankind."

Principles 6 and 7 stated that large discharge of hazardous substances should not exceed "the capacity of the environment to render them harmless." Principle 8 recognized that continued economic and social development was essential for improving human environment conditions. Related to such strives, Principle 9 stated that environmental problems resulting from "under-development" were best addressed by increased development "through the transfer of substantial quantities of financial and technological assistance as a supplement to the domestic effort of the developing countries." Principles 10 called for "stability and adequate earnings for primary commodities and raw material," and Principle 11 stated that "environmental policies of all States should enhance and not adversely affect the present or future development potential of developing countries."

Principle 16 contained cautious language on population control, stating that demographic policies that are deemed appropriate by national governments should be applied in cases where "the rate of population growth or excessive population concentrations are likely to have adverse effects on the environment or development, or where low population density may prevent improvement of the human environment and impede development." Principles 18 to 20 addressed the need for improved "education in environmental matters" and stated that technical and scientific research was essential for dealing with environmental issues and should be encouraged and promoted in all countries. Principle 26 targeted nuclear weapons, and stated that countries should work for the elimination and complete destruction of nuclear weapons.

During both the conference preparations and the conference, Canada, together with a number of other countries, pushed hard for the recognition of three specific legal principles in the Stockholm Declaration that would have a significant impact on international environmental law and cooperation: the responsibility of countries not to pollute areas beyond national jurisdiction, the requirement of states to compensate other states in cases of damage caused by transboundary environmental damage, and the requirement of states to consult with other states before engaging in activities that may cause environmental damage in neighboring countries (Rowland, 1973: 89-100).

On the first of these three legal principles, many countries and observes saw a conflict between the sovereignty principle and efforts to take effective international political action on environmental issues. Some argued that the sovereignty principle was so fundamental to international law that it should always take precedence and should not be weakened on the basis of environmental issues. Others saw the emergence of international environmental issues as yet another proof of a need for a revision of the sovereignty principle. In February 1972, four months before the Stockholm Conference, the Swedish Ambassador, Sverker Åström, who was the main architect of the Swedish proposal to the UN General Assembly in 1967 to hold a UN environmental conference, wrote that:

> It is one of the ironies of history that the principle of national sovereignty and equality received its triumphal confirmation in the Charter of the United Nations at the time when the introduction of atomic weapons, the development of communications, the rapid industrialization and the awakening consciousness of the environmental risk made it unmistakable clear that all of humanity is interdependent and that the old concept of sovereignty is inadequate. (Åström, 1972: 4)

The Stockholm Declaration did not question the central role of the sovereignty principle in international law, but it established important addendums to it. Among the Principles in the Stockholm Declaration, in particular Principle 21 – which is now an integral part of international environmental law – has had profound effects. The sovereignty principle provides states the right of sovereign states to exploit their own resources pursuant to their own environmental policies. Principle 21 of the Stockholm Declaration acknowledged this right, but assigned states a shared "responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other states or of areas beyond the

limits of national jurisdiction". To this end, Principle 21 has served as a legal basis for interstate cooperation on transnational environmental problems, and has been a political means for countries and non-state groups that have pushed for international agreements on transboundary environmental problems.

The second major legal principle – the requirement of a state to compensate other states in cases of damage caused by transboundary environmental damage – is addressed in Principle 22 of the Stockholm Declaration. Some countries saw the formulation of a compulsory compensation principle as an effective means to get countries to tackle domestic activities with negative environmental consequences, in order to avoid compensation claims. This was, however, fiercely opposed by other countries. Principle 22 does not introduce a firm requirement on compensation, but outlines a general obligation of states to further cooperate and develop "international law regarding liability and compensation for the victims of pollution and other environmental damage" caused by activities within the jurisdiction of a state to areas beyond the jurisdiction of that state.

On the third principle, the requirement of states to consult with other states before engaging in activities that may cause environmental damage in neighboring countries, there were harsh debates and conflicts in particular between Brazil and Argentina (Campbell, 1973: 149-150). These conflicts originated in plans by Brazil to build a dam on the Paraná River basin. The Paraná River originates in Brazil and runs through Argentina. Argentina feared that the building of the dam would have significant negative consequences for its water supply, and tried to stop the Brazilian plans. As a result of this proposed project, Argentina pressed hard for the principle requiring states to consult with their neighbors before taking domestic action that could harm the environment of other countries. To avoid this, Brazil fought equally hard to exclude the principle from the Stockholm Declaration, or at least have it included with a less binding wording.

Because consensus could not be reached on the wording of this principle, it was excluded from the Stockholm Declaration and referred to the UN General Assembly debate in the fall of 1972 on the request of Brazil. During the General Assembly debate, Brazil managed to secure enough support from the major powers – that were skeptical of the idea of such a principle as it could make them more vulnerable to critique and demands from other countries – to get the General Assembly to adopt a weakened version in which the word "consult" was excluded (Rowland, 1973: 136). However, countries pushing for the consultation principle did win a smaller victory in another forum as the duty to consult was included in the 1972 London Dumping Convention; however, that did not bind Brazil to have to consult with Argentina over the Paraná controversy.

One of the most tangible influences of the Stockholm Conference on the globalization of environment and development was the creation of the United Nations Environment Programme (UNEP) as a node for global cooperation and treaty-making. The idea of an UN environmental agency was presented by UN Secretary-General U Thant during a speech on "The Human Environment and World Order" at the University of Texas, Austin, on May 14, 1970 (Bäckstrand, 1971: 26; Cordier and Harrelson, 1977: 350). Thant made clear that he personally favored "a global authority with the support and agreement of governments and of powerful interests, which can pull together all the piecemeal efforts now being made and which can fill in the gaps where something needs to be done …. It should be able, if necessary, to police and enforce its decisions" (Cordier and Harrelson, 1977: 350). He also asked a pertinent question: "Do the sovereign nations of the world have the courage and the vision to set up and support such an agency now, and thus, in the interest of future generations of life on earth, depart radically from the hitherto sacred path of national sovereignty?" (Cordier and Harrelson, 1977: 350).

The discussions on the establishment of a UN environmental agency, however, were marked by stark political differences concerning what its mandate should be, how it should be funded, and where it should

be located. Some countries that generally favored multilateralism, such as many smaller northern European countries, together with several non-governmental groups and experts, envisioned UNEP to be a UN organization with some regulatory powers, similarly to the proposal made by U Thant. This was fiercely rejected by other states such as the United States, United Kingdom and France that feared an erosion of state sovereignty, and would not accept anything beyond a coordinating mechanism. As a result, the Stockholm Conference decided to recommend that the UN General Assembly set up a program to act as coordinator and catalyst of multilateral cooperation on the environment, rather than as an international regulatory organization.

On the location of the UNEP headquarters, several places were formally proposed, including Geneva, New York, London, Vienna, Madrid, Malta, Nairobi, New Delhi and Mexico City (Emmelin, 1972: 138). Quickly, New York, Geneva and Nairobi emerged as top candidates. New York, home of the UN headquarters, was primarily championed by the United States. Geneva, which also already was an important UN center, was backed by most industrialized countries that saw benefits of locating UNEP close to many of the other UN agencies that it would be working with closely. Nairobi was backed primarily by developing countries. The Nairobi proposal largely was based on the desire of developing countries to have the headquarters of a major UN organization in a developing country, rather than a strong belief in the importance of UNEP. The General Assembly decided that UNEP should be located in Nairobi. The decision passed with 93 states in favor, 30 abstentions (most industrialized countries), and one opposed (United States). Maurice Strong was appointed the first UNEP Executive Director.

Many of the global cooperative efforts on environmental issues post-Stockholm have been carried out under UNEP auspices. Because UNEP was to set up have a coordinating role, rather than being a supervising and enforcing entity, the UNEP Secretariat under the leadership of an Executive Director has been small, acting as a catalyst for technical, scientific and political cooperation. In fulfilling tasks identified by the UNEP Governing Council, UNEP has collaborated with a number of other UN specialized agencies, including FAO, UNESCO, WHO and UNDP. UNEP also has had close contact with non-governmental groups such as ICSU, IUCN, and the World Wildlife Fund (WWF) (Holdgate, 1999: 130-155). While UNEP has been criticized for not fully living up to its potential, it did create a legitimate forum for international debate and cooperation on environmental issues. Meyer et al. (1997) point to the importance of such a forum for generating inter-governmental environmental awareness and responses.

To organize its activities, UNEP structured a tri-level program strategy that was similar to the one used by the preparatory committee during the preparations for the Stockholm Conference (Caldwell, 1996: 87). The first level consists of producing the annual State of the Environment report and reviewing action on international, regional and national priority areas. The second level focuses on stimulating concrete action on problems identified at the first level. Such efforts have often taken the form of organizing international conferences on specific issues such as human settlements (Vancouver, 1976), water issues (Mar del Plata, 1977), and desertification (Nairobi, 1977), and facilitating the creation of multilateral environmental agreements (see below). The third level consists of activities focusing on supporting technical and scientific monitoring and research activities. Examples include the Global Environmental Monitoring System (GEMS), the International Environmental Information System (INFOTERRA) which is a joint venture with UNESCO, the International Environmental Education Programme (IEEP), and the International Register of Potentially Toxic Chemicals (IRPTC).

Caldwell (1996: 90) has noted that "Perceived national interest, rather than the Stockholm Declaration of Principles or the interventions of UNEP, has been the prime mover of international environmental cooperation." National sovereignty still very much reigned after the Stockholm Conference, despite efforts before and at Stockholm to foster a notion of a common international environmental interest. It was national governments that decided which actions should be taken and which decisions should be implemented. As such, it is not surprising that most of the progress in the environmental field post-

Stockholm was on issues that were mainly pushed by the wealthy industrialized countries at the Stockholm Conference; they were the countries with the most and best technical, scientific and economic resources to address environmental issues.

Based on interests of industrialized countries, much multilateral environmental cooperation post-Stockholm focused on marine and river pollution issues. Major international marine pollution agreements that were adopted post-Stockholm, but which had begun to be negotiated before Stockholm, included the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London, December 29, 1972), and the Convention on the Prevention of Pollution from Ships (MARPOL) (London, November 2, 1973). Important regional marine pollution agreements that were negotiated outside UNEP in the early 1970s included the 1972 Convention for the Prevention of Marine Pollution by Dumping from Ships and Aircraft (the Oslo Convention), the 1974 Convention for the Prevention of Marine Pollution from Land-based Sources (the Paris Convention), and the 1974 Convention on the Protection of the Marine Environment of the Baltic Sea Area (the Helsinki Convention).

Efforts also continued on the Law of the Sea that had begun to be negotiated in Geneva in 1958. In an attempt to create a more comprehensive and stringent legal framework for the world's oceans, the United Nations Conference on the Law of the Sea was held every year from 1973-1982. The United Nations Convention on the Law of the Sea, which was adopted in December 1982 in Montego Bay, Jamaica, marked the culmination of more than 14 years of activities. The agreement outlined detailed provisions for the use of oceans and their resources.

In 1974, the Governing Council decided to focus attention on "regional activities," making a specific reference to the Mediterranean (Thacher, 1977: 308). Under UNEP's Regional Seas Programme, technical, scientific and political activities began in the mid 1970s to draw up and implement protection plans for the Mediterranean and other regional seas, often within the framework of legally binding regional conventions. Such activities included active participation by UNEP, other inter-governmental organizations, regional governments, and non-governmental organizations. A Regional Seas Programme Activity Centre was set up in Geneva in 1977 to coordinate the work carried out under the program.

Conservation efforts also continued after Stockholm. The Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES), created in Washington D.C., in March, 1973, was a major conservation agreement. Moving ahead on air pollution issues, European and North American negotiations led to the 1979 Convention on Long-Range Transboundary Air Pollution. Global efforts on ozone depleting substances led to the 1985 Vienna Convention for the Protection of the Ozone Layer and the 1987 Montreal Protocol on Substances That Deplete the Ozone Layer.

While many developing countries had pointed to issues of land use and soil erosion in their national reports to the Stockholm Conference (UNCHE Country Reports), the issue of desertification did not receive much attention in Stockholm. However, in response to growing problems with drought, many developing countries called for a global strategy on desertification shortly after the Stockholm Conference, in part seeking international financial and technical resources to address desertification (Corell, 1999: 67-72). A UN General Assembly resolution from December 17, 1974 called for a UN Conference on Desertification, using the resources of the newly established UNEP in preparing for and organizing the conference.

The resultant United Nations Conference on Desertification (UNCOD) was held in August-September 1977, seeking to create an action plan on desertification. The subsequent Plan of Action to Combat Desertification contained 28 recommendations for national, regional and international action. However, the plan was largely unsuccessful due to a lack of funding and a failure to integrate the desertification

issue into other socio-economic programs (Corell, 1999: 67-72). The next major international attempt on desertification was the creation of the 1994 Convention to Combat Desertification.

The national reports that were prepared for the Stockholm Conference show that the compiling of national reports illuminated a number of domestic problems (UNCHE Country Reports). In several cases, this resulted in the creating of environmental ministries and agencies and intensified domestic enactment of environmental legislation and controls. Figures 1 and 2 illustrate when states for the first time set up environmental ministries, starting with the first environmental ministry that was established in 1971 by the United Kingdom, ending in 1995 when there were 103 environmental ministries in total. Figure 1 shows the number of environmental ministries established each year. Figure 2 shows the cumulative numbers. Appendix 2 lists individual countries in the order they established environmental ministries.
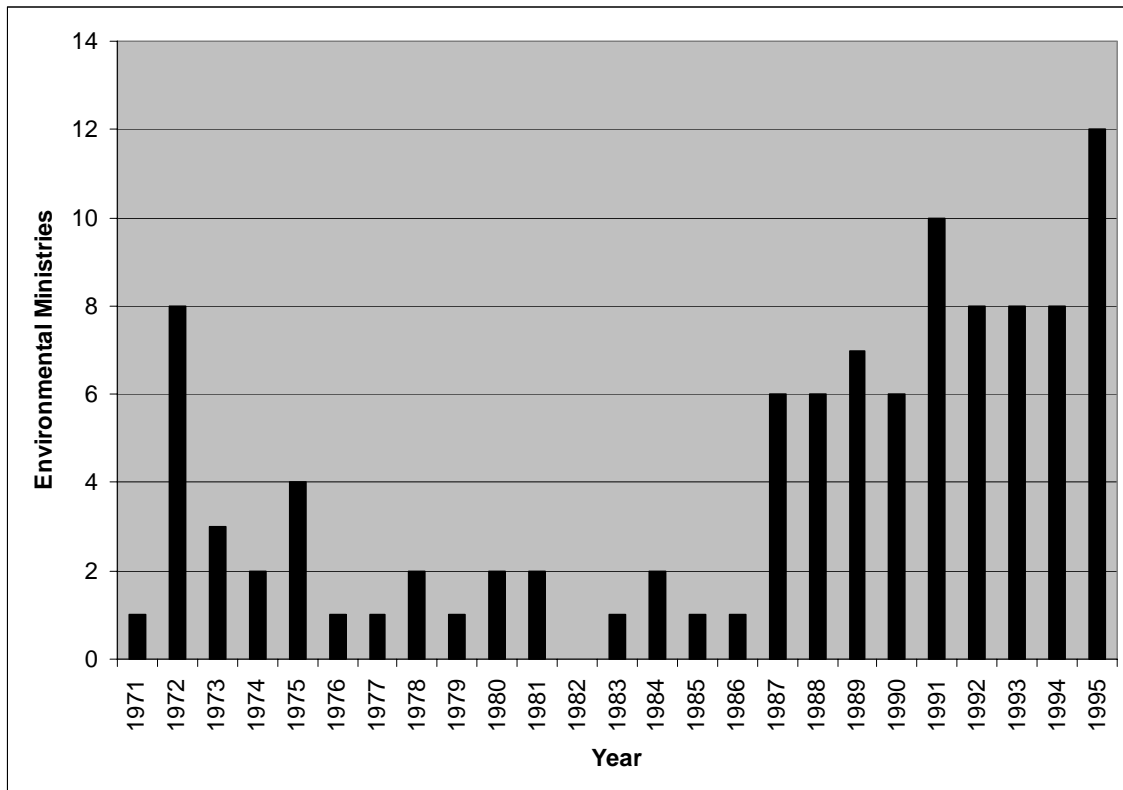
Figure 1: Number of environmental ministries established each year
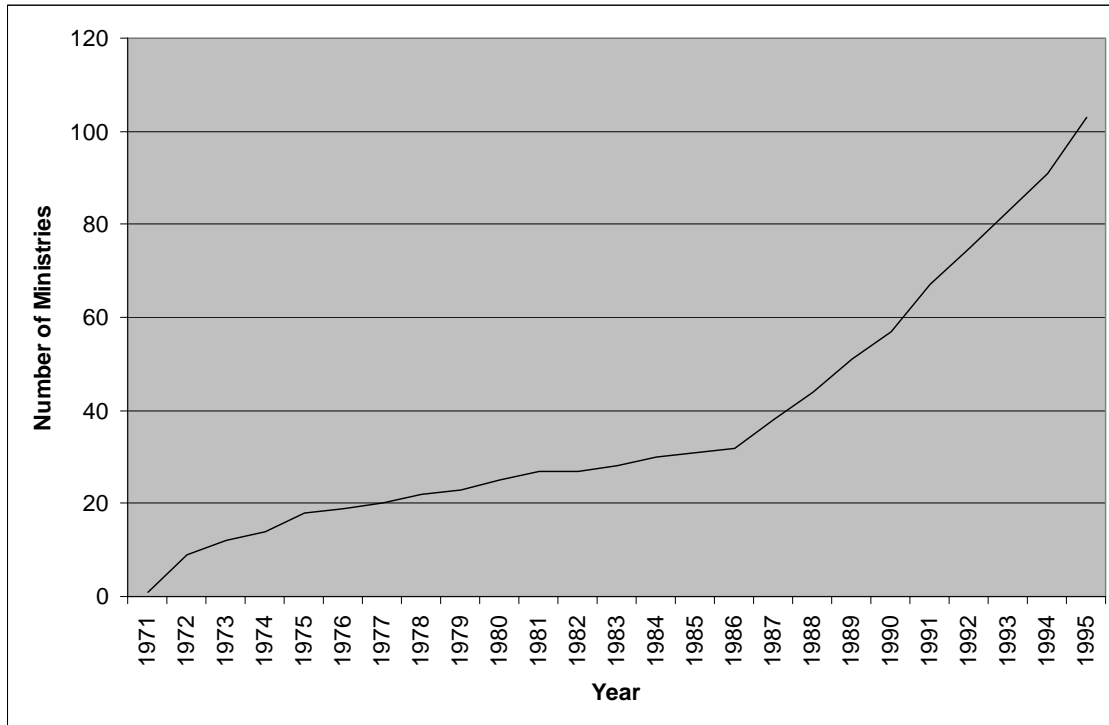
Figure 2: Cumulative numbers of environmental ministries

The national reports that were prepared for the Stockholm Conference show that domestic institutional change was often supplemented with an intensified domestic enactment of environmental legislation and controls (UNCHE Country Reports). This was particularly the case in developing countries: "While a number of these national measures might well have been taken anyway in the more industrialized countries, most of what was done in the developing countries clearly is attributable to the Conference and to the special assistance which was provided to many of them during the preparatory period" (Strong, 1973: 694-695).

5.3 Conservation, Environment and Development

Several attempts to link environment and development in the 1970s came within the traditional conservation movement. The most comprehensive of these efforts was the World Conservation Strategy. The World Conservation Strategy, which was similar in character to the Stockholm Action Plan, was launched by IUCN, UNEP and WWF simultaneously in 35 countries on March 5, 1980, including the UN Headquarters in New York. The Strategy sought to reconcile conservation efforts and strives for social and economic development by adding a stronger development dimension to existing efforts on conservation (Holdgate, 1999: 149-155). Discussions about the need for a strategic approach to conservation had started within IUCN as early as the late 1960s, but work on the World Conservation Strategy did not begin until the mid 1970s. These efforts were carried out under the auspices of several international organizations and were predominantly conceptual and rhetorical.

The World Conservation Strategy attempted to formulate common goals for conservation efforts in both industrialized and developing countries. Early drafting of the Strategy took place within the IUCN, but drafts were circulated to, among others, UNEP, FAO, UNESCO and WWF. The first version of the Strategy focused mainly on conservation, and was met with strong opposition from African members to the IUCN. They called for the strategy to have a broader focus, and to include language on both

conservation and development. In addition, UNEP pushed for a clearer recognition of the importance of development issues. Efforts to broaden the focus of the strategy in the late 1970s to more clearly involve development issues meant a broadening of IUCN's organizational mandate as well. The final stages of drafting of the World Conservation Strategy were a concerted effort by IUCN, UNEP, FAO, UNESCO and WWF. Maurice Strong was also involved in these activities; after leaving UNEP he was elected Chairman of the Bureau of IUCN in April 1977, working closely with the President of the IUCN (Holdgate, 1999: 136).

Later work on the Strategy sought to bring the conservation camp and the development camp together by stressing their mutual dependence, a task that was not always easy to accomplish. The final version of the World Conservation Strategy was jointly signed by the President of IUCN (Mohamed Kassas), the Executive Director of UNEP (Mostafa Tolba) and the President of WWF (John Loudon), showing that it was supported by both inter-governmental organizations and non-governmental organizations. In part building on the notion of eco-development, the World Conservation Strategy introduced the concept of sustainable development to a broader international public. Having a long tradition in some domestic settings, the notion of sustainable development now moved towards the center of the international debate. In this respect, the Strategy was an important forerunner to the Brundtland Commission.

The creation of the World Charter for Nature is another example of how early post-WW II conservation efforts intellectually influenced later action on environment and development. As in the case of the World Conservation Strategy, focus was on formulating common goals and responsibilities (rather than another attempt by developing countries to stress the need for separate treatment). The idea of a World Convention on the Protection of Nature had been discussed already at UNSCCUR in 1949, but was never realized (Holdgate, 1999: 148). However, the general idea of the need for a broad international document on nature issues continued to exist, although changing somewhat over time. At the meeting of the IUCN General Assembly in September 1975, President Mobutu Sese Seko of Zaire called for a Charter for Nature. The idea was taken up by IUCN, which began drafting a charter proposal. Through efforts by IUCN and Zaire, a Charter proposal was presented to the UN Secretary-General in 1980 who sent it out to UN member states for comments. A revised version based on comments from several countries was presented to the UN General Assembly in 1982.

The draft Charter that was presented in 1982 was met with both praise and criticism (Holdgate, 1999: 149; Caldwell, 1996: 98-100). Several European countries supported the Charter and argued that it acted as a logical compliment to the recently launched World Conservation Strategy. Other countries, such as many South and Latin American countries, Canada, India and the U.S., raised objections. These objections in part stemmed from a desire to protect national sovereignty, and echoed arguments at Stockholm. The Charter in several places used the word "shall," indicating a requirement, rather than the weaker "should" and some countries found such language inappropriate. In particular, the United States had also taken a considerably more skeptical attitude towards international environmental cooperation with the election of the Reagan Administration that had moved into the White House in January 1981.

The World Charter for Nature sprang from a traditional conservation tradition and only mentioned the word "environment" a few times. Instead it focused on the fact that conservation of nature had to be regarded as an integral part of social and economic development. The Charter stressed the need for the conservation of natural resources and systems for social and economic development for both present and future generations. To that end, the Charter reaffirmed Principle 21 of the Stockholm Declaration and called for increased scientific cooperation, policy making and implementation. Voting on the charter in the UN General Assembly on October 28, 1982, the World Charter for Nature was adopted with 111 states in favor, 18 abstentions (several South and Latin American countries), and one against (United States).

Caldwell (1996: 100) regarded the Charter for Nature "as a significant symbolic expression of a hope among nations to achieve a more harmonious and sustainable relationship between humanity and the rest of the biosphere – between mankind and earth." The Charter stressed the need for conservation of natural resources and systems for social and economic development for both present and future generations. To that end, the World Charter for Nature reaffirmed Principle 21 of the Stockholm Declaration and called for increased scientific cooperation and policy making and implementation. The Charter also stipulated that activities that that "disturb nature" should be carried out so as to "minimize potential adverse effects" (UNGA Resolution 37/7).

5.4 North-South Conflicts Continue

In the decade after the Stockholm Conference, North-South relations relating to environment and development issues were considered by United Nations specialized agencies, at international meetings, during UN General Assembly debates on international economic and trade practices and the use of the global commons, and by international commissions. However, substantial progress resulting in changed practices and behavior on a number of crucial environment and development issues that were identified at the Stockholm Conference and elsewhere remained elusive, as universalizing and differentiating views largely remained opposing.

Continuing conflicts between industrialized and developing countries on economic and development oriented issues often prevented progress on those issues that were prioritized by the global South. In the years immediately following the Stockholm Conference, there were few concerted efforts to take real action to implement the integration of environment and development issues (Elliott, 1998: 15). The first sessions of the UNEP Governing Council did little to move issues relating to environment and development forward in practice, although the rhetoric continued. One such rhetorical device that was promoted by UNEP, UNDP and other UN organizations was the concept of "eco-development," which focused on local conditions and possibilities for linking environment and development issues in policy making and planning.

Efforts on eco-development centered mainly on the need of developing countries. In this respect, the notion of eco-development relates to earlier discussions on environment and development concerns relating to developing countries that were expressed at Founex in 1971 and the Stockholm Conference in 1972. The term and its related efforts by international organizations were designed "to support the efforts of the people living in villages and other rural settlements" to better manage the use of natural resources and human skills for the purpose of local social and economic development (United Nations Development Programme, 1974). As such, focus was on how environmental issues intersect with considerations of, among others, human employment, housing, health, education and security across countries and cultures at local levels and ways in which ecological issues and development considerations could be better integrated.

Attempts were made by UN organizations and experts to expand the notion of eco-development to some issues relating to urban settlements and conditions (United Nations Development Programme, 1974). Because of the strong focus on developing countries, however, ideas of eco-development were only marginally applied to industrialized countries. This seems to be an important explanation of why eco-development did not gain much widespread attention or recognition among national policy makers and the public. In addition, only limited financial resources were spent on eco-development projects. As a result, the concept of eco-development was used mainly as a rhetorical concept by UNEP and other international organizations, rather than a means for guiding policy making and implementation on environment and development issues at national and local levels (Caldwell, 1996: 85; Holdgate, 1999: 151).

Although the concept of eco-development did not attract much attention, many of the ideas on environment and development relating to developing and industrialized countries that were formulated in the late 1960s and early 1970s continued to be discussed. This first major international attempt to revisit issues relating to environment and development post-1972 was the symposium on Patterns of Resource Use, Environment and Development Strategies that was held in Cocoyoc, Mexico, October 8-12, 1974. The symposium was organized jointly by UNEP and the United Nations Commission on Trade and Development (UNCTAD). This meeting was directly linked to the Founex meeting; the Cocoyoc meeting was actively supported by Maurice Strong in his capacity as UNEP Executive Director; it was planned as "Founex II," and it involved many of the same participants who attended the 1971 Founex meeting.

The general idea behind "Founex II" was to convene a second meeting in a series of periodic meetings of a similar character to "Founex I" "to update the information, to elaborate further on the issues, and to promote the crystallization of thought and emergence of new ideas" relating to environment and development issues from the perspective of developing countries (UNEP, 1975). The specific purpose of the Cocoyoc meeting was to discuss implications of the use of technologies that were destructive to the physical environment in light of the need for economic and social development. To this end, this was one of the first UN-sponsored meetings to examine connections between environmental protection issues and issues relating to global redistribution of economic and social resources (Anonymous, 1975: 893). In this respect, Cocoyoc became another platform for developing country policy makers and representatives to voice their differentiating views on environment and development.

As "Founex II," the Cocoyoc meeting built on the preparations for and holding of the Stockholm Conference, but was a return to the organizing of expert meetings rather than political meetings. The Cocoyoc meeting was attended by experts who served in their individual capacities, not as government representatives. The fact that it was an expert meeting, rather than a political meeting, helps to explain how a more radical declaration on environment and development could be adopted at Cocoyoc compared to the Stockholm Declaration. In addition, while the Stockholm Conference had begun as an idea of an environmental conference that came to include development issues, the Cocoyoc meeting was predominantly a development meeting that only looked at environmental issues in so far as they interacted with development concerns. Nevertheless, the link between environment and development issues was recognized at Cocoyoc.

The Cocoyoc Declaration presented a broad strategy for addressing development issues from a differentiating perspective. The Declaration noted that "the evils which flow from excessive reliance on the market system" had led to a failure to fulfill the development goals of the UN Charter for most of the world's population. Such a failure was not believed to be caused by a lack of physical resources, but by misuse and economic and social misdistribution within and across countries. Participants at the symposium argued that any solution to these problems could not be found in a continued reliance on free market mechanisms. It was believed that the notion of an automatic "trickling down" of wealth from rich countries to poor countries had been disproved, similar to several of the statements that were made at the Stockholm Conference. Instead, a new international economic system had to be created that specifically took into account the dire situation of developing countries.

The Cocoyoc Declaration stated that the primary objective of economic growth should be to improve social and economic situations for the poorest countries. Influenced by dependency theory (Furtado, 1971; Furtado, 1976; Cardoso, 1979), many experts and delegates to the Cocoyoc meeting argued that the unequal distribution of wealth between industrialized and developing countries contributed directly to environmental pressure and degradation. A forced cheapness of raw materials from developing countries had contributed to pollution and waste generation in industrialized countries. Further, severe poverty in many developing countries had led people in these countries to cultivate to the point of destructive soil

erosion and migrate to economically and socially run-down areas of overcrowded cities. Addressing these issues, the Cocoyoc Declaration supported UNEP's efforts to assist projects on eco-development, but called for more aggressive international action.

In its stand on international economic and trade issues, the Cocoyoc Declaration was linked to calls by intellectuals and representatives of many developing countries for a revision of the international economic and trade system, which they believed favored the interests of industrialized countries over the economic and social needs of developing countries. These efforts resulted in the UN Declaration and Programme of Action on the Establishment of a New International Economic Order, which was proclaimed by the UN General Assembly in May 1974 (UNGA Resolutions 3201 and 3202; Cox, 1979; Keohane and Nye, 2001). Discussing North-South relations, Roger D. Hansen at the Overseas Development Council in 1975 concluded that "at the very least, the past two years are likely to be remembered as the periods in which developing countries first made a serious attempt, individually and in groups, to institute major changes" on economic and development issues (Hansen, 1975).

A related attempt by developing countries to revise the international political and economic system that was linked to environment and development issues related to the global commons – areas outside the exclusive jurisdiction of any state or group of states that may be used for resource extraction, waste disposal or scientific research. Examples of global commons include the high seas, the atmosphere, Antarctica and outer space (Joyner, 2001). As technical and scientific advancements resulted in the increased use of the global commons for economic gains by industrialized countries, such as deep sea drilling, developing countries proposed that open access to these commons should be restricted. These natural resources and their subsequent economic benefits should not simply benefit those countries that had the human, technological and economic resources to benefit from the commons. Instead, the global commons should be classified as "Common Heritage of Mankind."

The principle of Common Heritage of Mankind holds that global common areas belong to all humankind, and not just the most technically advanced and powerful states (Joyner, 2001: 366-367). For that reason, economic benefits stemming from the commons should be shared by all countries and peoples. Linked to their calls for a new international economic order, developing countries proposed that revenues from the use of the natural resources of the global commons should be used to fund development programs and projects in developing countries. The notion of Common Heritage of Mankind also contained an inter-generational aspect: commons areas should be held in trust for future generations and not just be exploited for immediate benefits.

However, developing countries' efforts in the UN General Assembly on a new international economic order and the promotion of the principle of Common Heritage of Mankind for the management of the global commons did not have much success in changing international economic relationships and practices among countries or in influencing their use of the global commons. Even if developing countries attempted to work more in concert and promote common interests, strong resistance by industrialized countries to developing countries' proposals meant that few of their proposed changes were made to international economic and trade practices. While the principle of Common Heritage on Mankind was included in the UN Convention on the Law of the Sea, it still was not generally accepted as a strong customary legal norm.

North-South relations and development issues were also addressed by the Independent Commission on International Development Issues, the so-called Brandt Commission, named after its Chair, the German Chancellor Willy Brandt. The Commission originated in a proposal by Robert McNamara, President of the World Bank, in 1977. The Commission's members, many of them prominent politicians and policy makers, did not formally represent the governments of their home countries, but acted as "independent" experts (similar to the Founex and Cocoyoc meetings). The general purpose of the Brandt Commission

was to explore ways to break the growing deadlock between North and South on development related issues. "It is my firm conviction that a solution of the grave world-wide problems between North and South constitutes the main economic and social question for the rest of our century," Brandt announced when presenting the objectives of his Commission (Independent Commission on International Development Issues, 1977a).

Influenced by East-West politics, the Brandt Commission did not include any members from communist countries in the East, even though it attempted to encompass all major views and interests. The Brandt Commission had a strong focus on security issues and the relation between armament and development. However, one of the main points of agreement within the Brandt Commission was the need for a revised international economic and trade system. Its efforts on a "new system of orderly economic relations" the Commission argued that it was necessary to address inequalities between industrialized and developing countries. The Commission also looked at how environmental issues , such as food and agriculture, industrialization, population growth, development and transfer of technology exhaustibly resources and energy, access to water, environmental and ecological problems affected prospects for a more equitable world economy (Independent Commission on International Development Issues, 1977b).

Supported by staff from the World Bank, the Brandt Commission published two separate reports. In its first report, North-South: A Programme for Survival, published in 1981, environmental issues only received marginal attention. In the second report, Common Crisis: North-South Cooperation for Economic Recovery, published in 1983, environmental degradation was identified as serious constraint on effective development in the South. Seeking a common ground between North and South, the two reports stressed the existence of a mutual dependence: industrialized countries needed developing countries for their wealth of natural resources and markets, and developing countries needed industrialized countries for their development.

Focusing on a series of contentious issues between industrialized and developing countries – including agriculture, food, energy, trade, aid and the environment – the Brandt Commission presented a structural program to address all major North-South issues collectively. In this respect, the Brandt Commission gave voice to a more of a universalizing perspective on environment and development than Cocoyoc. However, the Commission's reports resulted in few structural changes and did little to solve any of the main North-South conflicts that they discussed.

5.5 Summary of Findings

The environment and development discourse continued to evolve throughout the 1970s, focusing on several specific issues such as air and water pollution, desertification, endangered species, conservation, urban conditions, rural development and international economic and trade issues. This discourse was fuelled by a range of activities by organizations and commissions, discussions in the UN General Assembly and at symposiums, developments in international law, and through the creation of multilateral agreements and scientific and policy programs. Although superpower relations grew colder during the 1970s, most environment and development related controversy continued to be between industrialized and developing countries regarding the handling of issues and financial and political responsibilities. As a result, there was often a lack of implementation on many of the environment and development issues that were identified in the early 1970s to require more multilateral cooperation, despite the fact that both industrialized and developing countries had pledged to work together.

6. Assessing Progress and the Road to Rio, 1982 to 1992

The World Commission on Environment and Development began its framing of the concept of sustainable development in a global context in the early 1980s. As the Commission began its work in 1983, inter-governmental organizations, governments, non-government organizations and the public looked back on over a decade of global cooperation on environment and development that were marked, above all, by very little substantial implementation on both environment and development issues. Despite the fact that governments had made strong political commitments and several policy responses had been formulated, most negative environmental trends had not been reversed and many development related concerns of the worlds poorest had not been addressed: it was clear to most policy makers and observers that the crucial but difficult leap from paper to practice mostly had not been taken.

In this section, we apply our four analytical perspectives to the ten-year period between 1982 and 1992, leading up to UNCED, which was held in Rio de Janeiro in June, 1992 – almost exactly two decades after the Stockholm Conference. By the time of UNCED, the environment and development debate was generally framed as a sustainable development debate. This debate had expanded to include a large number of top level politicians and policy makers from both industrialized and developing countries, as well as representatives of international organizations. As a sign of the political importance that was assigned to these issues, many more heads of states and governments attended the Rio Conference than the Stockholm Conference. In addition, public participation increased as the environment and development debate was re-cast as a sustainable development discourse. This could be seen in the high level of participation of non-governmental organizations in the preparations for the Rio Conference and the debate at Rio.

Institutional politics and political efforts for more multilateral cooperation and policy making on environment and development issues continued in the 1980s and expanded even further with the preparations for the Rio Conference. UNEP, together with several other specialized UN agencies, played important roles in sustaining attention to environment and development issues and preparing for the Rio Conference. The perhaps single most important institution during this period, the World Commission on Environment and Development, was crucial in propelling the concept of sustainable development into its central position on the international political agenda. Many of these efforts were actively supported politically and economically and by supplying human resources to commissions, meetings and secretariats by smaller countries operating through the UN system.

While Cold War politics and the increased ideological struggle between East and West in the early 1980s greatly mattered in UN affairs and international cooperation on traditional military and security issues, the predominant line of contention on environment and development issues continued to be between industrialized and developing countries; or, somewhat simplified, between a universalizing perspective of larger transnational environmental issues and a differentiating focus on local development concerns. The main question remained how conflicts between industrialized and developing countries could be overcome in order to achieve more fundamental progress and implementation on environment and development issues, as they had been outlined in, for example, the Stockholm Declaration, the Stockholm Action Plan, the Cocoyoc Declaration, the World Conservation Strategy, and the World Charter for Nature.

6.1 The Discourse of Sustainable Development

In the 1980s, the environment and development discourse changed into a sustainable development discourse, which remains the dominating discourse on environment and development issues. Many of the substantial environment and development related issues that were discussed in the 1960s and the 1970s fed into this sustainable development discourse, which very clearly linked to earlier debate and actions. In fact, the concept of sustainable development in many ways was a direct response to these earlier efforts and lessons drawn from failed past policy and implementation efforts. The concept of sustainable development, which came out of the World Conservation Strategy and the World Bank, was picked up and popularized by the Brundtland Commission in 1983. It was also the main concept of its 1987 report *Our Common Future* and the central theme of the preparations for and holding of UNCED in 1992.

Throughout the 1960s and the 1970s, the environment and development discourse was diverse. It was not structured around any single rallying concept, which weakened its ability to focus debates and cooperation toward a common end goal. The term eco-development was an attempt to focus debate and policy action on a specific sub-set of local environment and development issues, but it never became a central part of the overall discourse or its associated cooperative efforts. Trying both to inject new energy into the environment and development discourse and multilateral cooperation and build broader support for specific ideas and policy proposals, the Brundtland Commission hoped that a focus on "sustainable development" could help overcome the implementation gap of the 1970s and early 1980s (World Commission on Environment and Development, 1984, 1987).

The Brundtland Commission believed that it was necessary to more directly address economic concerns of politicians, policy maker and economists in order to achieve higher levels of implementation (Interview, Gro Harlem Brundtland, March, 2004). As such, the Commission attempted to give more weight to economic issues through the idea of sustainable development. In addition, the Brundtland Commission and other environment and development efforts such as the preparations for UNCED, struggled to overcome the North-South logjam. As such, the concept of sustainable development was combined with the idea of "common but differentiated responsibilities," which became a central theme in the sustainability discourse in the late 1980s and early 1990s.

The notion of "common but differentiated responsibilities" can be seen as an attempt to bridge North's universalizing and South's differentiating views on environment and development for the purpose of more effective policy making and implementation: All countries were identified as having a responsibility to work towards sustainable development (as advocated from a universalizing perspective) but countries did not necessarily have the same responsibilities or interests (as argued from a differentiating perspective).

6.2 Stockholm+10

In December 1980, the UN General Assembly decided to commemorate the tenth anniversary of the Stockholm Conference with a UNEP Governing Council Session of a Special Character that would be open to all UN members. This meeting, which is sometimes referred to as Stockholm+10, was held in Nairobi in May, 1982. 134 UN member states attended the meeting, delivering 127 statements (Environmental Policy and Law, 1982: 7). Whereas the Stockholm Conference was set up to be action-oriented and forward-looking, the Session of a Special Character was designed to be more retrospective. Its first and foremost goal was to review the extent to which the Stockholm Action Plan had been implemented. A second goal was to formulate recommendations for UNEP activities for the coming

decade. Such recommendations were to be general rather than in the form of a detailed action plan, as in Stockholm.

Two major UNEP documents were written for the Nairobi meeting assessing implementation and looking at principal trends during the post-Stockholm period: The Environment in 1982: Retrospect and Prospect and The World Environment 1972-1982: A Report by the United Nations Environment Programme. The two reports pointed to several instances in which there had only been partial implementation of both environment and development goals. UNEP Executive Director Mostafa Tolba opened the Nairobi meeting by noting the slow actions by governments in addressing central environment and development issues. Such sentiments were also expressed by many representatives of both developing and industrialized countries as well as NGOs, stressing the fact that many important environmental trends were negative, and more and more people in the global South were unable to meet their own most basic needs (UNEP 1982a, Environmental Policy and Law, 1982: 2-27; Scharlin, 1982).

The Declaration of the Session of a Special Character concluded that the results since 1972 had been far from satisfactory, and that it was a severe problem that the Stockholm Action Plan only had been partially implemented, both regarding environmental goals and development goals (UNEP, 1982a). It put the blame on, among other things, the state of the global economy: "A worsening of environmental problems in developing countries arising from the present international economic order which has slowed down their development and the protection of their environment" (UNEP, 1982b). Countries noted a lack of specific progress in, for example, poverty alleviation, providing of adequate housing and drinkable water for many people, combating soil erosion and deforestation, managing hazardous chemicals and wastes, and abating air and water pollution. The severe famine disasters plaguing large parts of Africa in the early and mid 1980s were further strong evidence of failure.

The placing of UNEP in Nairobi was seen as less than ideal by many practitioners and observers at the time. Yet the choice was officially backed by Strong, who wrote in Foreign Affairs in 1973 that "In my view, the additional administrative costs and inconveniences which may temporarily result from this will be more than offset by the political advantages of assuring that the new body has the kind of global political constituency and support which will be so essential to the performance of its global task" (Strong, 1973: 694). In his recent memoirs, however, Strong (2001: 141) admitted that "the reservations Sweden and others had expressed about Nairobi proved correct: our location was a handicap, not because we were in a developing country but because of our distance from those we had to persuade. Thus our coordinating function never became as effective as it was intended to be."

6.3 The World Commission on Environment and Development

Despite all the grand words in the Stockholm Declaration, the Cocoyoc Declaration, the World Conservation Strategy and the World Charter for Nature, it was increasingly recognized in the early 1980s that only minor steps had been taken to improve environmental conditions and social and economic development for the poorest. As noted above, UNEP Executive Director Mostafa Tolba had expressed disappointment over the slow progress in implementation of the Stockholm Action Plan at the Nairobi meeting in 1982. Further, in his first annual report, in 1982, he described the events over the previous twelve months as "disappointing" in that "the commitments and resources failed to match the words and declarations of the commemorative session of the Governing Council ten years after the Stockholm Conference" (Caldwell, 1996: 90).

Many governments in South and North, as well as non-governmental organizations, also became more vocal on the seemingly widening gap between promises and implementation in the early 1980s. The severe famine disasters plaguing large parts of Africa in the early and mid 1980s were further strong

evidence of a major failure. Aware of both past and recent shortcomings on taking real action on environment and development issues, the UN General Assembly in 1983 decided to establish an independent commission to formulate a long-term agenda for action on environment and development to try to spur actual progress on implementation. This Commission, which later assumed the name World Commission on Environment and Development, existed 1983-1986 under the leadership of the Norwegian Prime Minister Gro Harlem Brundtland. The Commission presented its report *Our Common Future* in 1987 (World Commission on Environment and Development, 1987).

The Brundtland Commission was arranged in a similar fashion as the Brandt Commission, as an "independent" expert group of high-level experts and government officials. Several of the 23 experts had earlier been active at the Stockholm Conference, in many of the efforts under UNEP in the 1970s and the Brandt Commissions, such as Brundtland herself, Maurice Strong, Jim MacNeill, Saburo Okita, Shridath S. Ramphal and Margarita Marina de Botero. The Brundtland Commission operated within the UN system, but it was not linked to any specific UN agency. As opposed to in the Brandt Commission, the East bloc was represented among the commissioners, including representatives from the Soviet Union, Hungary and Yugoslavia. In addition, China had one representative in the Commission. The UN General Assembly specifically expressed that half of the members of the commission should come from developing countries (UNGA Resolution 38/161); a request that was met with 14 commissioners from the global South.

The UN General Assembly resolution that created the Commission had a clear environmental focus, but linked environmental issues to development concerns. The resolution requested that the Commission should "propose long-term environmental strategies for achieving sustainable development to the year 2000" (UNGA Resolution 38/161, our italics). The Commission was also asked to recommend ways in which environmental concern could be translated into greater cooperation among developing countries and between countries at different stages of economic and social development. The Commission was tasked with presenting its findings in a report on the environment and the global problématique to the year 2000 and beyond, including strategies for achieving global sustainable development. However, at the onset of the Commission's work, North-South relations and geo-political concerns quickly came to the fore.

At the first meeting of the preparatory committee for the Stockholm Conference, in March 1970, the UN Secretary-General, U Thant, stated that "Mankind is also coming to the realization that a new dimension of time, reaching substantially into the future, must be added to its thinking, planning, and endeavors … We must carefully weigh the effects of present behaviour on the future if we do not wish to be considered by later generations as having failed our foresight" (Cordier and Harrelson, 1977: 347). Picking up on the importance of inter-generational awareness expressed in, for example, the Stockholm Declaration, the World Conservation Strategy and the World Charter for Nature, the Brundtland Commission proclaimed that to make development sustainable was "to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development, 1987: 8).

The Brundtland Commission acknowledged that meaningful progress in multiple environment- and development-related areas had been prevented largely because of persisting North-South disagreement. An explicit purpose of the Brundtland Commission was to formulate an agenda that would gain the support of both industrialized and developing countries (Interview, Gro Harlem Brundtland, March, 2004; World Commission on Environment and Development, 1984). For that purpose, the Commission adopted a more combined environment and development focus than was outlined in the UN General Assembly resolution that had created the Commission. To that end, the Commission examined a series of environment and development issues and how they related to the interests of both industrialized and developing countries and their future social and economic development needs. Such issues examined by

the Commission included population, food security, species and ecosystems, energy, industry and human settlements.

Tasked with formulating an action plan, the Commission attempted to combine the universalizing and differentiating perspectives of the North and the South. Under the slogan of "a common future" – similar to the idea of "only one earth" that was promoted at the Stockholm Conference – the Brundtland Commission argued that different conditions and needs in the North and the South resulted in different responsibilities for taking action towards a more sustainable future (World Commission on Environment and Development, 1987). The Commission followed many earlier events on environment and development in arguing that there was no inherent conflict between effective environmental management and the promotion of economic and social development. The previous decade, according to the Commission, had clearly demonstrated that benefits generated by environmental measures are often greater than their costs, especially those measures that were preventive in character. Thus, the commission underscored the mutually supportive relationship between environment and development (World Commission on Environment and Development, 1984: 9).

While the identifiable macro-economic consequences of expanding environmental regulation on investment, productivity and trade had been minor, many of the environment and development benefits had been positive. For example, it was argued that more jobs had been created through environmental measures than had been lost as a consequence of such measures. The Commission noted that the effects on industry had varied, but those at the forefront of technical innovation had benefited in terms of resource and energy efficiency and made them more compatible (World Commission on Environment and Development, 1984).

The growing interdependence of the international economic and political system was a core concern of the Commission. As had been reflected for a long time in demography, migration, agriculture, communications, energy, industry, minerals, technology and financial transfer, the Commission noted that "interdependence has become a dominant characteristic of many issues involving the environmental and the ecological basis of development" (World Commission on Environment and Development 1984). This growing interdependence was seen to severely limit the ability of governments to deal with environment and development issues unilaterally. The Brundtland Commission claimed that the most important feature of interdependence was not isolated subjects, fields or problems, geographical units or even the North-South aspects: it was the connections between and among all these components (World Commission on Environment and Development, 1984: 9-11).

Echoing Indira Ghandi's word at the Stockholm Conference that poverty was the greatest polluter, the Brundtland Commission proclaimed in its early definition of sustainability that underdevelopment and poverty, in many parts of the world, were "the greatest source of destructive pressure on the environment" (World Commission on Environment and Development, 1984: 12). The Commission identified three factors that caused the growing equity gap between and within countries: an increase in population, the current structure of international economic relations and the increase in per capita consumption by parts of the world population (World Commission on Environment and Development, 1984: 12).

The Brundtland Commission's definition of sustainable development can be seen as a refinement and expansion of the concept of eco-development that was employed by UNEP and other international organizations in the 1970s. Whereas eco-development attempted to focus attention to local development concerns, predominantly in developing countries, and also including environmental aspects, sustainable development was intended by its proponents to even more clearly link environment and development issues in both developing and industrialized countries. The concept of sustainable development was used in both the World Conservation Strategy and by the World Bank before it was picked up by the

Brundtland Commission, but it was its prominent use in *Our Common Future* that propelled it into the center of domestic and international policy debates on environment and development issues.

A major weakness of the concept of eco-development was that it never gained any recognition in the larger policy community. The Brundtland Commission deliberately aimed at defining the concept of sustainable development so that it would be accepted by economists, policy-makers and politicians in both industrialized and developing countries. The Commission's objective of proposing a politically feasible program of action would not work if the economists, especially those employed by governments, did not accept the fundamental premises. Many members of the Brundtland Commission believed that a failure to incorporate the support of government economists had undermined earlier efforts on environment and development and was an important explanation for the lack of implementation – earlier declarations, plans and programs had been rejected by government economists and experts for not adequately recognizing the economics of many environment and development issues (Interview, Gro Harlem Brundtland, March, 2004).

Environmental knowledge and concern in finance ministries was often low, but to achieve sustainable development, fundamental norms and principles of sustainable development had to be incorporated in the work and policies of finance ministries and other key government agencies. In an attempt to broaden the appeal of the sustainable development concept, the Brundtland Commission proposed what it called an "alternative agenda," examining related issues from the perspective of their linkages in economic, social and sectoral policies. The Commission hoped that this "new" agenda would make it possible to reach "a new and critically important audience; namely, those key individuals and agencies which have a major influence on economic and social policies, and on development, in government and industry, nationally and internationally" (World Commission on Environment and Development, 1987: 29).

In addition, the Commission addressed geopolitical and national security concerns. National security and environmental risk was pinpointed as one of the Commission's five transcending themes, along with interdependence, sustainability, education and communication, and equity. The Commission believed that economic and ecological interdependence as well as global environmental risks should be included in national security concerns. In its strategic document from October 1984, the Commission stressed that ecological degradation and environmental risks were becoming a significant causal factor in economic, social and political unrest. While such threats were in essence non-military, they could lead to a crisis situation, which could trigger the use of military force. The Commission argued that against the background of interdependence, sustainability, equity and security, environment and development issues emerge as complex geopolitical syndromes that challenge existing forms of international discussion and cooperation (World Commission on Environment and Development, 1984: 13).

The final report of the Brundtland Commission highlighted the connection between environmental stress and political tension and military conflict. The report drew upon examples of several regional conflicts, such as conflicts in the Horn of Africa, but it also viewed environment, development and security issues in the context of the Cold War (World Commission on Environment and Development, 1987). In the report, the Commission argued that environmental threats to security were emerging on a global scale. Even though the report was published as the détente of the latter half of the 1980s were reducing tensions between the two superpowers, it warned of the consequences of a nuclear war such as a nuclear winter. The Commission viewed the possible ecological effects of a nuclear conflict as yet another sign of increasing global interdependence: "The findings on nuclear winter are vitally important too for non-aligned nations, predominately in the South, which are not parties to the East-West conflict. They cannot expect to avoid the potentially disastrous environmental consequences of nuclear war in the northern hemisphere" (World Commission on Environment and Development, 1987: 295-96).

In the so-called "Tokyo Declaration," which was issued by the Brundtland Commission at its final meeting, the Commission called upon all countries to integrate sustainable development into their domestic policy making and policy goals. The Commission provided eight principles to guide such domestic action: Review Growth, Change in the Quality of Growth, Conserve and Enhance the Resource Base, Ensure a Sustainable Level of Population, Re-orient Technology and Manage Risks, Integrate Environmental and Economics in Decision-making, Reform International Economic Relations and Strengthen International Cooperation. Most of these themes had been elaborated at the Founex meeting, the Stockholm Conference, the Cocoyoc symposium and by the Brandt Commission. The Brundtland Commission acknowledged the importance of these earlier meetings, programs and declarations, but attempted to bring them together in a more comprehensive manner.

Both by reference and in content, the work of the Brundtland Commission built on the long process of trying to link environment and development that is described in this paper. To promote its work, the Commission put a lot of effort into making its work known through the media. When *Our Common Future* was presented in 1987, the bi-polar conflict of the Cold War was drawing to an end. While the Cold War situation and Cold War politics were evident in the work of the Commission and its final report, East-West conflict had no apparent influence on the reception of the report. Instead, it was the North-South dimension of the environment and development issue that gained the most public and political attention. The work by the Commission was also driven by an ambition to overcome the North-South divide: to find a way to persuade governments that environmental and economic and social development concerns had to be truly integrated in policy making at the highest political level, both nationally and internationally.

6.4 The Challenge of Rio

It was decided at the Stockholm Conference that a new global UN environmental conference on the human environment should be organized to follow up the results of 1972, but no date was set for such a conference. Largely as a result of the progress review at Stockholm+10 demonstrating crucial shortcomings and the work by the Brundtland Commission in formulating a strategic agenda for addressing environment and development issues, several governments began calling for a second global action-oriented conference on environment and development issues. Several highly publicized issues – such as the famine disasters in Africa, the discovery of the Antarctic ozone "hole" and a rapidly thinning stratospheric ozone layer, growing difficulties with hazardous chemicals and hazardous wastes, acidification and eutrophication – also gained public attention, supporting the idea of a new conference to address these and related issues.

The issue of a second global conference was raised in the UN General Assembly in 1986 as the Brundtland Commission was finishing its work. A December 1989 UN General Assembly Resolution set the wheels in motion for the United Nations Conference on Environment and Development (UNCED), held in Rio de Janeiro, in June 1992. Like most efforts on environment and development since the late 1960s, the preparations for UNCED were marked by North-South disagreement and tension between a universalizing focus on transnational environmental issues and a differentiating focus on local strives for social and economic development. In an attempt to overcome at least some of these tensions, governments in both the North and the South agreed in principle on the notion of "common but differentiated responsibilities" – both industrialized and developing countries had a responsibility to address environment and development issues, but these responsibilities were not necessarily the same for all countries.

UNCED and its anticipated outcomes were intended to build on the conceptual and institutional achievements of the Stockholm Conference and efforts post-Stockholm, but to be more effective where

Stockholm had tried and largely failed. The general purpose of the Rio Conference and Agenda 21, which was adopted at Rio as an action plan on environment and development for the 21st century, was to create a better foundation for effective action and implementation towards global, regional and local sustainable development. It was widely acknowledged that such progress could only be achieved by more constructive cooperation between industrialized and developing countries. The ending of the Cold War resulted in improved East-West relations, but the dominating conflict between the North and the South on issues relating to environment and development was only marginally affected by the ending of the Cold War.

6.5 Summary of Findings

The concept of sustainable development, which became a central theme of the environment and development discourse in the 1980s, was heavily influenced by earlier policy efforts and lessons drawn from these. Multilateral cooperation and institution building continued, and the work of the Brundtland Commission and the preparations for UNCED took place against the backdrop of a widely accepted failure of countries and international organizations to address many crucial environment and development issues in the 1970s and early 1980s. The ending of the Cold War only marginally affected the politics of sustainable development, and the dominating contention on environment and development issues continued to be between industrialized and developing countries. Attempting to overcome some of the gap between a universalizing focus on transnational environmental issues and a differentiating concern with local development issues, governments in both North and South gathered around the notion of "common but differentiated responsibilities." Building on this theme, UNCED was intended to produce outcomes that would ensure more effective implementation in both industrialized and developing countries toward a more sustainable future.

7. Concluding Remarks and Areas for Future Research

Sustainable development is an area of growing importance in international politics and policy making. Few issues areas have seen a similar increase in international cooperation over the past 40 years as this area. From environment and development issues receiving only scant international political attention in the early 1960s, sustainable development is currently a central issue for much international deliberation, policy making and implementation. This sharp increase in international cooperation on environment and development issues gives rise to the question of which have been the most important driving factors on the expanding international cooperation on environment and development over the past over four decades, and what that can inform us about current efforts on sustainable development.

This paper demonstrates that there has been international cooperation on environment and development issues since the early 1900s. Yet, much academic work on issues of sustainable development starts with the Brundtland Commission (Toman, 1994; Godland, 1995; Bartelmus, 2003; Howarth, 1997; Faucheux, Pearce and Proops, 1996). Few analysts ask the question of where these issues originated and the political situation within which they grew. In this paper, we show that the Brundtland Commission and subsequent policy efforts on sustainable development are a confluence of several streams of international political efforts on environment and development. While many commentators view the Stockholm Conference as primarily an environment conference (Caldwell, 1996; Haas, 2001), we argue that the environment and development debate was very much present at Stockholm.

In this paper, we analyze the historical process of addressing intersecting environment and development issues from the first efforts on international species protection to the decision to hold UNCED in 1992 through four sets of analytical perspectives: the emergence and influence of an international environment and development discourse; an international political push for more multilateralism and building of new multilateral institutions; power politics including the influence of Cold War relations; and North-South politics and conflicts.

Identifying and analyzing the environment and development discourse can tell us how international environment and development issues are framed and discussed over time. In addition, studying the environment and development discourse provides a means for identifying issues and factors that have shaped cooperation and policy making over time. Political debates and action on species protection efforts in the early 1900s attempted to secure ecological conditions for long-term harvesting of economically and socially important species. After WWII, broader issues of natural resource management issues were linked to geopolitical security concerns and debates. By the 1960s, there was an emerging distinct international discourse on environment and development. Much of this discourse stemmed from environmental concerns formulated in the industrialized world, although issues of population growth and economic and social development concerns of developing countries soon became a central component in this discourse.

International institutions have been important carriers of the environment and development discourse. International organizations have served as important forums for the environment and development discourse, as politicians, policy makers and experts have debated environment and development issues in the UN General Assembly, numerous UN agencies and economic organizations such as the World Bank and the World Trade Organization. International organizations have also played very active roles in preparing meetings (such as the Founex meeting, the Stockholm Conference, the Cocoyoc symposium and the Stockholm+10 meeting), aiding expert commissions (such as the Brandt and Brundtland Commissions), developing policy programs on environment and development issues and working to facilitate their implementation (such as UNEP's regional seas program, the World Conservation Strategy

and the World Charter for Nature) and help negotiate multilateral agreements (such as Law of the Sea and the Vienna Convention for the Protection of the Ozone Layer).

Many countries have been actively engaged in the environment and development discourse and have led efforts to formulate related principles, practices and policies. The first international policy efforts on environment and development were largely driven by countries in the northern hemisphere. In these cases, northern countries attempted to create programs and negotiate agreements to forward common interests regarding species protection and conservation (such as the Convention between the United States and other Powers providing for the Preservation and Protection of Fur Seals). Industrialized countries continued to dominate international cooperation in the aftermath of WWII, which coincided with the beginning of the Cold War and a gradually intensifying East-West hostility. In addition, a growing number of developing countries began to voice contradicting views in the 1960s, demanding that their different interests and conditions were taken into account in the formulation of policy.

Post WWII cooperation and policy making on environment and development took place in the shadow of the Cold War era. Cold War politics dominated many international military and security issues. East-West competition also influenced issues of natural resource management and environment and development activities in the United Nations and other international organizations. However, East-West controversy was often of a more procedural character, such as the disagreement over the participation of East Germany at the Stockholm Conference and participation in expert commissions. In fact, both the Soviet Union and the United States used environmental issues as a means to promote East-West cooperation in times of super power détente. Moreover, radically diminishing East-West tension over the last decade seems to have had only marginal influence on efforts to achieve sustainable development, indicating that this was not a dominant line of controversy and contention.

Instead, we argue that cooperation and policy making on environment and development up until the late 1980s was characterized to a much higher degree of conflicting interests and views between industrialized countries and developing countries, or between the global North and the global South. North-South controversy dominated much of the period from the late 1960s up to the Rio Conference. This controversy marked the debate and often cast its shadow over policy making and implementation. Attempting to overcome this controversy was a major task of the Brundtland Commission, as well as the driving force in the preparations for and holding of the Rio Conference. In this paper, we portray this tension between the global North and the global South on environment and development issues in terms of a tension between universalizing and differentiating views.

Universalizing views were predominantly expressed by northern industrialized countries, stressing the need for all countries irrespectively of level of industrial development to address (transboundary) environmental issues. The Stockholm Conference, as well as many later cooperative endeavors, can be seen as efforts to promote common interests assigning countries with common responsibilities. The theme of the Stockholm Conference was fittingly *Only one Earth*. Similarly, the Stockholm Declaration attempted to promote a common outlook and laid down common principles for policy action. The Stockholm Action Plan and other later policy programs such as the World Conservation Strategy and the World Charter for Nature presented strategies for governments based on common responsibilities.

In contrast, many mainly developing countries stressed differences in domestic conditions and interests between the global South and the global North and argued for more differentiated responsibilities and approaches between industrialized and developing countries in addressing environment and development issues. Giving voice to such a differentiating view, developing countries criticized a perceived cultural, economic and political hegemony of the global North. Instead, developing countries argued that improving social and economic conditions would be the most effective way to address environmental concerns in developing countries. While many of developing countries' concerns became part of the

discourse and were recognized in political declarations, few of their advocated changes survived the implementation phase.

Our research shows that the concept of sustainable development as defined and popularized by the Brundtland Commission emerged as a response to the long-standing North-South conflict over environment and development issues from the 1960s to the 1980s. In addition, many of the ideas and assumptions that are at the core of the concept of sustainable development and the issues discussed in the Brundtland Commission report *Our Common Future* go back at least to the preparations for the Stockholm Conference. This included the belief that economic growth benefits environmental protection, the necessity of addressing environment and development in an integrated manner across issue areas in domestic and international planning and policy making, and the need for an inter-generational focus. Through the Brundtland Commission and UNCED, cooperative efforts attempted to stimulate better implementation in both developing and industrialized countries.

In our future research we will continue to study the historical process that led to the central position of the concept of sustainable development in the international discourse, cooperation and policy making on environment and development issues. We will do this to continue deepen our understanding of factors that influence success and failure of policy making and implementation. To that end, we will continue to elaborate and specify our four analytical perspectives and apply them in more detail to our four historical periods. This will include more empirical research relating to, for example, developing countries' efforts on a New International Economic Order, the influence of international economic conditions on environment and development issues, and the preparations for UNCED, as well as reviews of existing studies on these issues.

In addition, we will expand our empirical research and analysis to the post-Rio period, WSSD and beyond. We will relate our four analytical perspectives to the international debate, cooperation and policy making on sustainable development from UNCED to the present and compare that to our analysis of the pre-Rio period to identify significant similarities and differences. In particular, we will focus on central aspects of the sustainable development discourse, main areas of multilateral cooperation and institution building, the influence of the post Cold War international order, and North-South controversy to see how this often dominant factor during the pre-UNCED period has changed (or not changed) since 1992. In doing this, we will focus on efforts to improve implementation and implications of past and present efforts to draw lessons for future action on sustainable development.

Appendices

Appendix 1: Time-line of important events, 1872-1992

Year	Event
1872	● The Swiss government called for an international regulatory commission on migratory birds in Europe
1909	● The International Congress on the Protection of Nature was held in Paris
1911	● The first international conservation treaty, the Convention between the United States and other Powers providing for the Preservation and Protection of Fur Seals was negotiated
1913	● The International Conference for Nature Protection that was held in Bern established the Consultative Commission for the International Protection of Nature
1931	● The Second International Congress for the Protection of Nature was held
1933	● The meeting of the Convention for the Protection of African Flora and Fauna was held in London
1945	● The Charter of the United Nations was adopted
1949	● United Nations Scientific Conference on the Conservation and Utilization of Resources was held in Lake Success ● The International Technical Conference on the Protection of Nature was held
1957	● The International Geophysical Year began
1959	● The International Biological Program was launched, operating until 1974
1962	● Rachel Carson's *Silent Spring* was published
1963	● The UN Conference on the Application of Science and Technology for the Benefit of the Less-Developed Areas was held
1966	● The first photo of Spaceship Earth
1967	● Sweden proposed an environmental conference in the UN General Assembly ● Paul Ehrlich's *The Population Bomb* was published
1968	● The Intergovernmental Conference of Experts on a Scientific Basis for a Rational Use and Conservation of the Resources of the Biosphere was held ● UN General Assembly decided to hold a conference on the human environment
1970	● The first meeting of the preparatory committee for the Stockholm Conference
1971	● The Man and the Biosphere program was created, still operating ● The Founex meeting was held in Switzerland ● The Convention on Wetlands of International Importance Especially as Waterfowl Habitat was created
1972	● The United Nations Conference on the Human Environment was held in Stockholm ● Club of Rome's *Limits to Growth*, the Ecologist's *Blueprint for Survival*, and *Only One Earth* by Barbara Ward and René Dubois were published ● The Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter was adopted
1973	● The first meeting of the Governing Council of United Nations Environment Programme (UNEP) was held ● The Convention on the Prevention of Pollution from Ships (MARPOL) was created ● The Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES) was created
1974	● The Symposium on Patterns of Resource Use, Environment and Development Strategies was held in Cocoyoc, Mexico

1979	● The Convention on Long-Range Transboundary Air Pollution was created
1980	● The World Conservation Strategy was launched
1982	● UNEP Governing Council held the Session of a Special Character celebrating the tenth anniversary of the Stockholm Conference ● The World Charter for Nature was adopted ● The United Nations Convention of the Law of the Sea was created
1983	● The World Commission on Environment and Development was established, operating until 1986
1985	● The Vienna Convention for the Protection of the Ozone Layer was created
1986	● Sweden proposed a follow-up conference to the Stockholm Conference in the UN General Assembly
1987	● *Our Common Future* was published ● The Montreal Protocol on Substances That Deplete the Ozone Layer was created
1989	● UN General Assembly decided to hold a conference on environment and development ● The Convention on Control of Transboundary Movements of Hazardous Wastes and Their Disposal was created
1992	● United Nations Conference on Environment and Development was held in Rio de Janeiro

Appendix 2: Establishment of environmental ministries, 1971 to 1995

Year	Country	Year	Country	Year	Country
1971	United Kingdom	1987	Germany-West	1992	Zambia
1972	Canada	1987	Italy	1992	Jamaica
1972	Japan	1987	Sweden	1992	Uruguay
1972	Austria	1988	Guinea	1992	Bulgaria
1972	Denmark	1988	Sao Tome and Principe	1992	Malta
1972	Germany-East	1988	Brazil	1993	Cameroon
1972	Netherlands	1988	Mongolia	1993	Ghana
1972	Australia	1988	Philippines	1993	Rwanda
1972	New Zealand	1988	Hungary	1993	Saint Kitts and Nevis
1973	Singapore	1989	Central African Republic	1993	Thailand
1973	Norway	1989	Chad	1993	Vietnam
1973	Poland	1989	Gabon	1993	Albania
1974	Burkina-Faso	1989	Mali	1993	Kiribati
1974	Mauritius	1989	Sudan	1994	Lesotho
1975	South Africa	1989	Trinidad and Tobago	1994	Bahamas
1975	Malaysia	1989	Maldives	1994	Honduras
1975	Luxemburg	1990	Senegal	1994	Nicaragua
1975	Papua New Guinea	1990	Zimbabwe	1994	Colombia
1976	Zaire	1990	Belize	1994	Turkey
1977	Venezuela	1990	Saint Vincent and Grenadines	1994	Spain
1978	France	1990	Portugal	1994	Solomon Islands
1978	Ireland	1990	Romania	1995	Algeria
1979	Indonesia	1991	Comoros	1995	Madagascar
1980	Kenya	1991	Ivory Coast	1995	Mozambique
1980	Jordan	1991	Tanzania	1995	Antigua
1981	Gambia	1991	Barbados	1995	Cuba
1981	Greece	1991	Grenada	1995	Haiti
1983	Niger	1991	Israel	1995	Bolivia
1984	Mexico	1991	Korea – South	1995	Bahrain
1984	Finland	1991	Czechoslovakia	1995	Cyprus
1985	Oman	1991	Iceland	1995	Sri-Lanka
1986	Uganda	1991	Soviet Union	1995	Fiji
1987	Sierra Leone	1992	Benin	1995	Western Samoa
1987	Togo	1992	Mauritania		
1987	India	1992	Tunisia		

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