

**EUROPEAN COMMUNITY'S ENVIRONMENTAL
POLICY AND ITS APPROACH TOWARDS
CENTRAL-EASTERN EUROPE :
RELEVANCE FOR INDIA**

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To My
Parents



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C E R T I F I C A T E

Certified that the present dissertation on "European Community's Environmental Policy and its Approach towards Central-Eastern Europe: Relevance for India" being submitted by Ms. Manisha Marwaha is worthy of consideration for the award of Master of Philosophy degree of the Jawaharlal Nehru University. This is her own work and has not been published or presented for the award of any degree of any other University in India.

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PREFACE

The Europe of the 1990s is experiencing some of the most profound political, economic and social changes than any other part of the globe. The European Community assumes importance for possessing the institutional framework to integrate the region despite functioning within many constraints. In order to understand better how the Community functions, an interesting way is to follow the working of one of its policies.

The environment policy was selected for being topical as well as relatively recent in its development and towards which the European Community attaches great significance. This policy also has a vital role to play in the assistance programme of the Community to the countries of Central-Eastern Europe. The Community had to adopt an approach on an immediate basis to respond to the environmental hazards of the region. Its policy approach reflects the influence of current issues in the global environmental debate - such as the issue of 'sustainable development'. This makes it all the more relevant for an understanding of how EC policy evolves, and then to examine briefly the difference in its approach towards and lessons for a developing country like India.

More than ever, changes in the global environment have called greater attention to the relationship between people and the environment as a crucial factor in shaping relations between people and nations. The ecological approach to international relations was first introduced by Harold and Margaret Sprout in

(ii)

1971 with the publication of Toward a Politics of the Planet Earth.¹

The perspective recognises that people-environment relationships form social phenomena while recognising the variations in social responses to the same pressures.

An ecological perspective² begins with the observation that human beings share an ecosystem with many other species of flora and fauna and are a part of the ecosystem. Human populations are subject to ecological and biological imperatives similar to those governing other species. Natural resources are an important concept in building a link between human populations and ecosystems. The type of resources available within a country structures a population's potential for autonomous growth and development. Resources required have not been equally distributed among states and most highly industrialised countries depend on resource bases outside their jurisdiction.

As domestic pressure has built up for access to new supplies, the 'lateral pressure' has resulted in various types of expansionist activity. It has also had a positive response in encouraging integration of the world economy.

Technology is the third important concept in developing an ecological perspective. In an environment now characterised by

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1. Harold and Margaret Sprout, Toward a Politics of the Planet Earth (New York: Van Nostrand Reinhold, 1971).
 2. Dennis Pirages, "The Ecological Perspective and the Social Sciences", International Studies Quarterly (1983) vol.27, pp.243-55.

perceived resource scarcity, technological innovation focusses on improvements in resource utilisation and making effective use of each consumed resource. At one level, technology is responsive to price signals and 'creates' additional resources through efficiency while, at another, technology modifies human relationships with the environment by creating by-products that threaten long-term damage to the ecosystems. This has a significant impact on relations between nations. Technology can enhance national capabilities while its by-products, if not properly managed, can create global problems such as acid rain and global warming, dramatically altering the relations of human populations with each other and the ecosphere.

These elements in the ecological perspective can be applied to the situation confronting the European Community in its relations with the countries of Central-Eastern Europe. While both the halves of Europe are faced with a situation of resource depletion, the environmental problems of the East have been magnified by a production-oriented industrial strategy with little concern for the environmental costs and consequences. Its impact has been felt on the West in increased levels of air pollution (seen in acid rain, enhanced levels of sulphur dioxide and nitrous oxide emissions as well as carbon dioxide) and water pollution (extending to lakes, rivers and seas). The greatest impact of transboundary pollution was felt after the Chernobyl disaster of 1985 when Europe was shaken by the fear of transboundary impact of radiation and radioactive substances.

Western Europe, with a post-war legacy of high standards of environmental protection made more stringent by the European Community, has been confronted with a lack of such standards in the East. Added to this is the need for transfer of environment-sustainable and environment-friendly technologies that would help transfer the industries of the Central-East European countries in the shift to a market economy.

The political climate in Europe has experienced a major shift in recent years. A recent landmark was the Paris Summit of the thirty-four Heads of State and Government of the Conference for Security and Cooperation in Europe (CSCE) held from 19-21 November 1990. Following the historic Final Act in Helsinki in 1975, it was a major meeting bearing historic significance for a cohesive Europe, also represented through the participation of the European Community.

All present at the Summit signed the "Charter of Paris for a New Europe" to confirm the end of European divisions and for defining structures that would create an identity for a new European continent. The Charter has three main guiding principles - human rights, economic cooperation and security and the commitment of the signatories to "democracy and fundamental freedoms".

All of these, in one way or another, depend upon the realisation of sustainable development in the East which does not threaten the environmental security of the continent or the globe.

With its own move towards integration into a single unified market, the European Community is the best equipped to coordinate the task of providing financial assistance to restructure the economies of Central-Eastern Europe. The result is the Community-G-24 PHARE programme of coordinated support for the economies of certain Central and East European countries.

The field of this Dissertation is still a relatively new area of study and a major constraint is availability of material that would permit a comprehensive analysis of the environmental situation in the region and the multilateral aid effort. For instance, details of German multinational investment for environmental protection in Central and Eastern Europe are practical nil. Some primary documentation by the European Community was accessible but the need to study day-to-day changes involved extensive use of articles in Secondary sources. Within these parameters, an effort has been made to analyse the existing situation to the best extent possible.

This dissertation is divided into four chapters. Chapter One discusses the major challenges to the global environment and the 'green alert' that has been sounded over the past decade on the need to sustain the ecological resource-base.

Through an understanding of the developments in the global environmental movement, it is possible to see that Community environmental policy has not evolved alone but in response to such international pressures. The evolution and features of

the European Community's environmental policy are discussed in the Second Chapter.

Chapter Three examines the environmental crisis in the Central-East European countries of Hungary, Poland and the Czech and Slovak Republic (CSFR) and analyses the response of the European Community and its influence in the region.

Chapter Four briefly analyses the nature of the European Community's "PHARE Programme of Economic Assistance" and its effectiveness in the economic restructuring of the region, especially the environmental dimensions.

The impact of all this and its relevance for India as a developing country is finally drawn together in the Conclusion.

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To my class-mates, I raise a toast remembering the classes, Seminars and endless discussions over tea of the past two years. In particular, a warm thanks to Rekha and Bhaskaran for 'standing by', especially during the days of writing the chapters. I would also like to thank my Seniors - Ummu Salma and Rajyalakshmi for all their help at vital moments in the structuring of this work.

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(Manisha Marwaha)

EUROPEAN COMMUNITY'S ENVIRONMENTAL POLICY
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EUROPE - RELEVANCE FOR INDIA

CHAPTER ONE

GLOBAL ENVIRONMENTAL CHALLENGES: INCREASING FOCUS ON THEIR MANAGEMENT

"The global environment cannot be separated from political, economic and moral issues. Environmental concerns must permeate all decisions, from consumer choices through national budgets to international agreements. We must learn to accept the fact that environmental considerations are part of the unified management of our planet. This is our ethical challenge. This is our practical challenge - a challenge we all must take".

Gro Harlem Brundtland¹
Former Prime Minister, Norway

The environmental problem is no longer characterised solely in terms of pollution control which would require management of the environment, as was believed during the 1960s. Environmental management is now widely accepted as the holistic management of all human activities bearing significant impact upon the environment. Such activities include patterns of production and consumption, the use of energy, manufacturing and supply technologies, domestic water supply and food production, to cite a few examples.

The challenge of protecting the environment has become an integral part of the international dialogue.² A survey of the global environmental movement indicates its broad classification in the form of two waves. The first wave developed in the 1960s over mounting concern with the spread of pesticides, oil spills and river

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1. World Commission on Environment and Development, Our Common Future (Oxford: Oxford University Press, 1987).
 2. John Mc Cormick, The Global Environmental Movement: Reclaiming Paradise (London: Belhaven, 1989), pp.171-93.

pollution and reached its apex in 1972 at the Stockholm United Nations Conference on the Human Environment. During the decade commencing from the mid-1970s, governments did not take their environmental commitments seriously due to a variety of economic reasons, including the oil crisis of the late 1970s. However, the second environmental wave of the mid-1980s was propagated by a series of environmental disasters alongwith growing fears over the "Greenhouse effect" and depletion of the ozone layer and the environmental consequences of wars.

Such environmental disasters occurred at Bhopal in India (leak of deadly methyl isocyanate in 1984), Chernobil in the Soviet Union (radioactive explosion in 1986), Seveso in Italy and Basel in Switzerland (toxic chemical spills in 1976 and 1986) and great 'Exxon Valdez' tanker oil spill in Alaska in 1989.³

The crisis cannot be more devastatingly seen than after the forty-two day Gulf War from 17 January - 28 February 1991. It has been recognised as being the most environmentally destructive conflict in the history of warfare.⁴ The burning fires from the 500 oil wells around Kuwait spewed tons of toxic gases into the air, plunging the area into semi-darkness and being the cause of a major health hazard. Oil slicks extended across the Gulf coastline into Saudi Arabia, killing marine life. Water pollution from burnt oil sewage has serious long-term consequences. Operation Desert Storm

3. Norman J.Vig and Michael E.Kraft, Environmental Policy in the 1990s (Washington D.C.: Congressional Quarterly Inc., 1990), p.14.

4. Hari Sharan Chhabra, "Nightmare in Gulf", World Focus (New Delhi), vol.12, no.1, January 1991, pp.10-13.

led to a dramatic increase in the number of violent sandstorms and sanddunes encroaching airports, agricultural settlements and villages. The oil wells which are ablaze would also have an impact on the South-West Asian monsoon, strengthening it for at least three seasons. This might give rise to the danger of floods.

Other recent conflicts such as in Afghanistan or the on-going civil war in the Balkans has seen massive destruction by defoliation, burning of forests, breaching of large dams and widespread bombing of industrial targets - with grave environmental damage.⁵ There is a proposal to draw up a fifth Geneva Convention outlawing the destruction of the environment as a war crime. It is hoped that all five permanent members of the United Nations Security Council would agree upon it, in order for the Convention to be effective.

The regions of the Soviet Union and Eastern Europe require a complete environmental reconstruction as reports of alarming levels of air and water pollution, problems of environmental health and the degradation of soils and forests are coming to light. The instances of ecological devastation are duplicated in both the continents due to the shared experience with authoritarian regimes and central planning which stressed productivity and output at the cost of the environment. The economic base remains oriented towards heavy industry in contrast to the service-driven economy of the West.

The Soviet Union covers one-sixth of the earth's land mass and is responsible for 19 percent of world emissions of carbon dioxide (CO₂), 13 percent of chlorofluorocarbons (CFCs), and

5. Myers, Norman, "Environment and Security", Foreign Policy (Washington D.C.), no.74, Spring 1989, pp.23-41.

approximately one-fifth of sulphur dioxide. Eastern Europe accounts for 7 percent of global CO₂ emissions and 4 percent of CFCs and a significant share of this pollution is transferred to Western Europe.⁶ The polluted rivers of the region have also found their way into the lakes and seas. In the Soviet Union, Lake Baikal - the largest body of fresh water in the world, is threatened by industrial pollution and agricultural runoff. The pollutants of the Elbe river flow into the North Sea and the Volga into the Caspian Sea (which receives 40 percent of the Soviet Union's waste-water annually). The Baltic Sea which receives more than 46 percent of its nitrogen load and more than 53 percent of its organic waste from Poland, Eastern Germany and the Soviet Union has a sharp reduction in marine life. The Aral Sea⁷ which until 1973 was the fourth-largest inland body of water in the world, has been reduced through faulty irrigation practices when the rivers feeding it were diverted for other agricultural purposes. As a result, since 1960 the volume of the Aral Sea has been reduced by 66 percent, its surface area has decreased by 40 percent, and its fall in level is nearly 13 metres. Industrial pollution in both the Soviet Union and Eastern Europe has also been responsible for declining biological productivity, acid rain-related forest damage and health problems, especially increasing rates of heart disease and cancer.

Such developments have damaged the ecological systems and caused widespread destruction of the natural resource base on which human life and well-being depend. More than ever, the global environmental movement of the 1980s and 1990s is marked by the

6. Hilary F. French, "Green Revolutions: Environmental Reconstruction in Eastern Europe and the Soviet Union", Columbia Journal of World Business (New York), vol.26, no.1, Spring 1991, p.29.

7. *ibid.* p.36.

realisation that the future of the world faces its greatest threat from the capacity of the earth to support life rather than from the threats in traditional military terms. It is no coincidence that with the cessation of the Cold War and the disbanding of the Warsaw Pact, the North Atlantic Treaty Organisation (NATO) is trying to forge a new agenda for Europe based on environmental protection.⁸

A new pattern has emerged with the realisation of the phenomenon of global interdependence. Technological advances have created a global system of information flows, production and distribution, investment and finance that is most strongly evident in the concern for environmental protection. The transboundary nature of environmental problems has served as a grim reminder of the reality of this interconnection.

The roots of this environmental revolution lie in conservation - the preservation and careful use of natural resources. The conservation movement made ecology a household word, addressing the theme of preservation of natural diversity. A growing concern was over the limits of nature at self-renewal, as expressed in Barry Commoner's "Four Laws of Ecology":⁹

Everything is connected to everything else.
Everything must go somewhere.
Nature knows best.
There is no such thing as a free lunch.

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8. Allen L. Springer, "Protecting The Environment: A New Focus For The Atlantic Alliance" in The New Europe: Revolution in East-West Relations, Proceedings of the Academy of Political Science (New York), vol.38, no.1, pp.129-39.
 9. Barry Commoner, The Closing Circle: Nature, Man and Technology (New York: Knopf, 1971), pp.33-48. See also, by the same author, Making Peace With The Planet (New York: Pantheon, 1990).

The ecology debate has been concerned with the problems of the people of today and tomorrow, the totality of plant and animal species, the globe and the biosphere. Some of the best known publications of ecology deal with such future-oriented problems.¹⁰

The issue of the stability or instability of the ecosystem is a part of this debate. The scientists' concept of the ecosystem is that of a collective entity of plants and animals interacting with one another and the non-living (abiotic) environment in a given place. An ecosystem is thus a sub-set of the global economy of nature.¹¹

It has come to be accepted that ecological safety can no longer be defined locally. Hence, ecology - the study of the relationships between living organisms and their surroundings, along with conservation and the need to preserve the ecosystem, have formed the basis of a more holistic environmentalist movement. The study of the environment is regarded as more inclusive in its methodology and materials.

10. These include - D.Meadows, The Limits To Growth, (New York: Universe Books, 1972); P.Ehrlich, Ecoscience: Population, Resources, Environment, (San Francisco: W.H.Freeman, 1977); M.Mesarovic and E.Pestel, Mankind at the Turning Point, (New York: Signet, 1974); D.Orr and M.Soroos, The Global Predicament: Ecological Perspectives on World Order, (Chapel Hill: University of North Carolina, 1979); and G.Barney, The Global 2000 Report to the President, (Washington: US Government Printing Office, 1980).

11. The classic explication is given in Eugene Odum, Fundamentals of Ecology, (Philadelphia: 1971), pp.8-23.

Planet Earth has been an important symbol in this movement.¹² The first "Whole Earth Catalogue" was published in 1968; "Earth Day" was first celebrated in 1970; "Earth First!", a radical environmental group, was founded in 1971, and the book "Only One Earth" was released at the 1972 UN Conference on the Human Environment. The just-concluded 1992 United Nations Conference on Environment and Development was popularly termed the "Earth Summit". The text of the Pledge taken at the Summit reads as follows:¹³

Recognising the peoples' actions towards nature and each other are the source of growing damage to the environment and resources needed to meet human needs and ensure survival and development, I pledge to act to the best of my ability to help make the Earth a secure and hospitable home for present and future generations.

The environment movement has given rise to the current New Environmentalism which has bypassed the established conservation movement with its emphasis on activism. "Friends of the Earth" founded by David Brower in the United States in 1969 was one of the first of the politicised, activist environmental groups to emerge.¹⁴ The philosophy of this and similar groups is that a solution to environmental problems does not lie in temporary remedies but in a fundamental social change. "Greenpeace", the most overt of such

12. Lynton K.Caldwell, International Environmental Policy: Emergence and Dimensions (Durham, N.C.: Duke University Press, 1984), pp.21-25.

13. Quoted in Ahtesham Qureshy, "The Rio Summit: Environmental protection involves all", Hindustan Times (New Delhi), 29 May 1992.

14. *ibid.*, n.2, p.143

direct action groups was again founded in the United States in 1971 with a specific agenda at the time of opposition to atmospheric nuclear tests. Greenpeace protest activities against French nuclear tests¹⁵ led to a reprisal in July 1985 when their ship "Rainbow Warrior" was blown up at the harbour in Auckland, New Zealand, by the French Intelligence Service. One Greenpeace volunteer died and the subsequent controversy led to the resignation of the French Defence Minister, Charles Hernu.

It is the presence of such groups and non-governmental organisations that have contributed significantly towards an enhanced awareness of environmental issues. No less important has been the pivotal role played by the Green parties in Europe in reflecting public opinion in policy-making. Their major political victory occurred in March 1983 with the election of twenty-seven parliamentarians representing "Die Gruenen" to the West German Bundestag. Other victories include the Swiss Greens who won two seats in 1979, followed by the two Belgian parties in 1981, "Di Greng Alternativ" in Luxembourg in 1984, Austrian Greens in 1986, Finnish and Italian Greens in 1987, and the Swedish Greens in 1988. The Greens are also a strong lobby in the European Parliament, securing more than thirty seats in the 1989 elections. Though espousing an environmental platform, the Green manifesto includes ecology, social responsibility, grassroots democracy and nonviolence.

These groups and parties have helped cohere national interests towards securing international cooperation on the environment. However, such efforts at cooperation have been marked by divergent opinions on the most suitable development patterns and

15. *ibid.*, n.2, pp.137-41.

on environmental responsibility, especially between the North and the South. The debate emerges more clearly with a look at global issues of environmental conflict.

Issues in the global environmental debate

A landmark in the global environmental movement was the Stockholm Conference on the Human Environment from 5-16 June 1972, which was attended by delegates from 113 countries and approximately 400 non-governmental organisations. The publication of the widely circulated Report of the Club of Rome just a few weeks earlier gave greater momentum to the Conference and its slogan of "Only One Earth". The Declaration of the Final Act emphasised the need for international cooperation in the area of the environment, defined clearly in the important Article 21:

States have... the sovereign right to exploit their own resources pursuant to their own environmental policies, and the 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.¹⁶

Hence, the reality of transfrontier pollution was an issue within that period. As a result of the Conference, the United Nations Environment Programme was created for implementation of the Action Plan. Several international research programmes were launched such as the Man and Biosphere Programme (MAB) aiming to break down the barriers between

16. Brian Johnson, "The United Nations" Institutional Response to Stockholm" in David Kay and Eugene Skolnikoff, eds., World Eco-Crisis (Madison, 1972), p.104.

natural and social scientists, and the International Geosphere-Biosphere Programme on Global Change (IGBP) for developing a predictive understanding of the Earth System, especially in relation to changes that affect the biosphere.¹⁷

A closer look at the issues raised indicates that the environmental challenges to be faced currently are an extension of those of 1972. Recognition of the physical limits of the ecosphere and its impact on the future economic and political stability raised an important agenda of concern - namely to preserve the global commons. The impact on the global ecosystem of growth in resource consumption has been documented in global models which suggest that:

if present trends continue, the world in 2000 will be more crowded, more polluted, less stable ecologically, and more vulnerable than the world we live in now. Serious stresses involving population, resources and environment are clearly visible ahead. Despite greater material output, the world's people will be poorer in many ways than they are today.¹⁸

Even the World Resources Institute, in an analysis of global environmental issues, realistically assesses the magnitude of the world's tasks and claims "the era we are now entering is new in human experience".¹⁹

17. J.K.Maheshwari, "Let earth have its day", National Herald (New Delhi), 22 April 1992.

18. G.Barney, The Global 2000 Report to the President (Washington D.C.: US Government Printing Office, 1980), p.1.

19. See World Resources Institute, The Crucial Decade: The 1990s and the Global Environmental Challenge (Washington D.C.: WRI, 1989).

The most widely-used Global Commons - the oceans and the atmosphere have been widely regarded as a free-for-all - the former as a medium of transport and a source of fish and minerals. Both have been dumped with effluents and are a major source of transferring pollution.

The past decade has shown in a most alarming manner that the demands placed on natural resources by human economic activity are more than what the earth's ecosystem can sustain. As a consequence, the ozone layer is thinning, massive climate changes are likely to occur with the greenhouse effect, soil depletion, shortage of fresh water and diminishing of tropical forests - to name a few areas. Industrial production has grown more than a hundred fold and emissions of a number of toxic metals because of human activity has become several times the level emitted from natural sources.

There has been a global alarm over the prospect that emissions of chlorofluorocarbons (CFCs), chlorinated compounds, carbon dioxide, and nitrogen oxides could react with the stratospheric ozone, depleting the ozone layer and increasing the level of harmful ultraviolet radiation reaching the surface of the earth.²⁰ The effect of CFCs was first discovered by two scientists at the University of California, Mario Molina and F.S.Rowland, in 1974. The United States, Canada and Sweden almost immediately banned the non-essential use of CFC propellants in sprays and did little else beyond. The issue was revived again in 1985 with the discovery by British scientists of a thinning (or a 'hole') in the ozone layer over Antarctica which

20. R.E.Benedick, Ozone Diplomacy: New Directions in Safeguarding the Environment (Washington D.C.: The Conservation Foundation, 1991).

appeared to be growing in size. Data gathered by the US Nimbus-7 satellite confirmed these findings and measurements made at the Japanese station Swoya placed the size of the 'hole' to be between 15-20 km.

The issue led to the adoption in March 1985 of the Global Convention on the Protection of the Ozone Layer in Vienna by 28 countries. In February 1987, representatives of the major industrialised nations met in Vienna to reach an agreement on freezing CFC production levels and phasing them out gradually. The final agreement was signed as the Montreal Convention on 17 September 1987 by 56 countries which agreed to freeze consumption of the five most common types of CFC in 1990 at 1986 levels, followed by reductions of upto 50 percent by the year 2000. Parties to the 'Montreal Protocol on Substances that Deplete the Ozone Layer' reached a landmark agreement at London in June 1990 that addressed the issue of financial resources to make it possible for developing countries to develop alternate modes of technology. However, the global activists of the South believe that India and China are deliberately being made to pay for maintaining the consumption levels of the West.²¹

An issue of perhaps even greater controversy is that of global warming, a fallout of ozone depletion.²² The atmosphere is being charged by the 'greenhouse effect' - the warming of the atmosphere due to the radioactive properties of certain gases,

21. Vandana Shiva, "North-South Conflicts", Frontier (Calcutta), vol.24, no.24, 25 January 1992, pp.12-16.

22. A.P.Mitra, "Global Warming: The Greenhouse Effect", The Hindu Survey of the Environment 1991 (Madras), pp.76-79.

accumulating due to economic activities. These are primarily the burning of fossil fuels and the destruction of the rainforest, responsible for releasing carbon dioxide into the atmosphere that causes 60 percent of the 'greenhouse effect'. Methane, largely from herds of cattle and fields, contributes 30 percent. The remaining tenth comes mainly from chlorofluorocarbons such as nitrous oxide and low-attitude ozone.²³

The concern is not just that the atmosphere is changing but that the changes which used to take over a century to occur are now taking place in a drastically shorter span of time, even exceeding the natural effects. There has been a resurgence of global warming in the 1980s. The record for the hottest year was in 1988, followed by 1983, 1987, 1984 in descending order. The Inter-governmental Panel on Climate Change²⁴ has forecast that a doubling of greenhouse gas levels means "an enhancement of the precipitation of the South-West Asian monsoon".

The controversy has arisen over the World Resources Institute in Washington having listed India and China as being among the five biggest emitters of greenhouse gases in the world. This listing has been challenged by the Delhi-based 'Centre of Science and Environment'²⁵ which has drawn a distinction between the luxury

23. Neville Brown, "A War against Warming", The Round Table (London), no.320, October 1991, pp.445-53.

24. Report prepared for the Inter-governmental Panel on Climate Change by Working Group I, "Scientific Assessment of Climate Change", World Meteorological Organisation and United Nations Environment Programme (Geneva), June 1990.

25. Anil Aggarwal and Sunita Narain, Global Warming in an Unequal World, (New Delhi: Centre of Science and Environment, 1991).

emissions of the North with the survival emissions of the South - such as the generation of methane by growing paddy and raising cattle.

The United States has agreed to hold its emissions of greenhouse gases in 2000 AD at the 1987 level, which is a very marginal commitment. In contrast, Australia, the Netherlands and U.K. have committed themselves to reducing emissions between 1988-2005 by a third. Germany, France and Italy are prepared to cut down by 43-45 percent. The Working Group I has indicated an alarming rise of temperature of 3-4°C by the turn of this century. As such, drastic action may be needed to reduce the rise of temperature back to the steady level from 0.3°C to 0.1°C per decade.

Another major global issue is that of preservation of biodiversity. Biodiversity refers to a variety of land forms, especially species. Biologists have identified a million-and-a-half species world wide, but estimate the total number to be five to thirty million.²⁶ Biodiversity is important due to three main factors. Values from biodiversity include materials for food, clothing, shelter, and as feedstocks for medicines, genetic research and cross-breeding. Ecosystems provide use values indirectly through interconnections that pollinate, spread seeds or support fauna. Biodiversity also produces existence and amenity values through parks and nature reserves. Biodiversity and genetic diversity in particular have become highly politicised issues and there is now talk of "gene drain" from the South to the North. This is because

26. E.O.Wilson, "The Current State of Biological Diversity" in E.O.Wilson, ed., Biodiversity (Washington D.C.: National Academy, 1988), pp.3-18.

the genetic and related sciences offer tremendous potential for creating value from biodiversity. A more diverse ecosystem has been found to be a more stable one.

Major fears have been expressed world-wide over the reduction in density of tropical forests. Population growth, fuelwood consumption and slash-and-burn agriculture have contributed to massive deforestation in developing countries. The rights of indigenous forest peoples have been subordinated by vested commercial interests involved in cattle-ranching, mining, hydro-electric development, oil exploration, logging, plantation agriculture and other profit-oriented ventures.²⁷

Although biodiversity is the heritage of all, there is widespread fear of exploitation in the South as the application of biotechnology²⁸ and genetic engineering has led to the involvement of multinational corporations in this area. Also, countries with a maximum biological diversity are the ones with hardly any means for sustained conservation. So far, the donors of germplasm have been the developing countries and the beneficiaries are the developed ones, leading to concern in the South that such resource transfer should be restrained.

These crucial environmental issues need to be seen in the context of the debate between environment and development. The belief that sustained economic growth is both possible and a key to

27. James A.Swaney and Paulette I.Olson, "The Economics of Biodiversity: Lives and Lifestyles", Journal of Economic Issues (Tennessee), vol.26, no.1, March 1992, pp.1-27.

28. Vandana Shiva, "Biotechnology - Exploding the Myth", Illustrated Weekly (Bombay), 24-30 June 1990.

human progress has come under challenge. Sustainable development makes an effort to break with the growth myth in popular thinking and institutions. An influential forum in articulating this argument was the 1983 World Commission on Environment and Development, chaired by Gro Harlem Brundtland, which released the book "Our Common Future" in 1987.²⁹ The Report called for a more responsible use of environmental resources, a dramatic reduction in arms expenditure, elimination of poverty and greater use of multilateral approaches in dealing with environmental issues.

In the context of ideas the Brundtland Report descended from the "World Conservation Strategy" (1980), which first gave currency to the term "sustainable development" and stressed that conservation of natural resources could not be achieved without poverty alleviation. More recent writing on the theme has made it widely recognised that economic growth alone is not to be equated with sustainable development.³⁰ (See also Table I overleaf for definitions of Sustainable Development).

The annual "State of the World" by Worldwatch³¹ presents alarming data on global warming, ozone depletion, land degradation,

29. World Commission on Environment and Development, Our Common Future (Oxford: Oxford University Press, 1987).

30. See R.Goodland, H.Daly, S.El Serafy and B. von Droste, eds., Environmentally Sustainable Economic Development: Building on Brundtland (Paris: UNESCO, 1991); and D.W.Pearce, ed., Blueprint II: Greening the World Economy (London: Earthscan, 1991).

31. Lester R.Brown et al, State of the World 1991: A Worldwatch Institute Report on Progress towards a Sustainable Society (New York: W.W.Norton, 1991), p.160.

shrinking biomass and waning biodiversity. Lester Brown provides corroborating evidence that growth does not necessarily eliminate poverty. He observes that on average the additions to global economic output achieved during each of the past four decades has matched total economic growth since the beginning of civilisation until 1950. However, during these four decades of unprecedented growth, we have also seen an unceasing increase in the numbers of absolute poor and the rate of environmental destruction and social disintegration. A second widely held myth that integration of the global economy is the key to growth has been exposed by Daly and Cobb.³² Their work analyses why policies aimed at integrating the world economy are in opposition to the requirements of sustainable development.

32. Herman E. Daly & John B. Cobb Jr., For the Common Good: Redirecting the Economy toward Community, the Environment and a Sustainable Future (Boston, MA: Beacon, 1989), p.234.

TABLE I

DEFINITIONS OF SUSTAINABLE DEVELOPMENT

"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs... Living standards that go beyond the basic minimum are sustainable only if consumption standards everywhere have regard for long-term sustainability."

World Commission on Environment and Development,
Our Common Future (Oxford, 1987).

"Sustainable development... involves providing a bequest to the next generation which is at least equal to that inherited by the current generation."

D.W.Pearce et al, Blueprint for a Green Economy
(London: Earthscan, 1989).

"Sustainable development means improving the quality of human life while living within the carrying capacity of supporting ecosystems. A "sustainable economy" maintains its natural resource base. It can continue to develop by adapting, and through improvements in knowledge, organisation, technical efficiency, and wisdom."

IUCN, UNEP and WWF, Caring for the Earth: A Strategy for Sustainable Living (London: Earthscan, 1991).

"A sustainable society is not necessarily the same as a zero growth society. That concept is as primitive as that of perpetual growth. Rather a sustainable society will discriminate among kinds of growth, and purposes of growth. It will ask what growth is for, who will benefit, what it will cost, how long it will last, and whether it can be accommodated by the sources and sinks of the Earth. That is to say, a sustainable society will be less interested in growth than in development... To grow means to increase in size by the assimilation or accretion of materials. To develop means to expand or realise the potentialities of; to bring to a fuller, greater, or better state. When something grows it gets quantitatively bigger; when it develops it gets qualitatively better."

D.H.Meadows et al, Beyond the Limits
(London: Earthscan, 1992).

It is interesting to see how international aid-giving institutions have responded to developmental issues.³³ The World Bank's environmental reform programme began under President Barber Conable in 1987. It was a re-arrangement of former President Robert Mc Namara's policy in the 1970s to make the Bank address poverty-related issues. Conable called for greater involvement of environmental and grassroots NGOs in the Bank's operations and committed the Bank to financing various types of environmental programmes. Some of these, such as the Tropical Forestry Action Plan and the programme of Forced Resettlement have met with widespread criticism from NGOs for being counter productive to their aims.³⁴

The World Development Report 1991 brought out by the World Bank³⁵ reiterates its major finding in development experience - that accelerated economic growth and integration of the world economy are the keys to human progress. The central point of the Report regarding the environment is that only through economic growth can resources required for investments in environmental protection be

33. Pat Aufderheide, Bruce Rich, "Environmental Reform and the Multilateral Banks", World Policy Journal (New York), vol.5, no.2, Spring 1988.

34. Bruce Rich, "The Emperor's New Clothes: The World Bank and Environmental Reform", World Policy Journal, vol.7, no.2, Spring 1990, pp.305-31.

35. World Bank, World Development Report, 1991: The Challenge of Development (Washington D.C., 1991), 290 pp.

forthcoming. In fact, it marks a striking contrast from the 1992 World Development Report³⁶ which has 'Environment and Development' as its main theme. The crux of the 1992 Report is to integrate environmental considerations into development policy-making. Unlike the 1991 Report, poverty alleviation is given great emphasis for being not only a moral imperative but essential for environmental stewardship. The Bank's definition of successful sustainable development is not in producing less but in producing differently. It argues in favour of industrial nations assisting transfer of less polluting technologies to developing countries.

The United Nations Development Programme (UNDP) Reports do not share the World Bank's preoccupation with gross national product as an index of well-being and progress. The UNDP assigns a human development index to each country based on areas such as educational qualifications, life expectancy, income and progress towards elimination of absolute poverty. UNDP, 1991,³⁷ concludes:

If a better link is to be created between income and human development, it is mandatory to adopt policies that distribute these economic assets and opportunities more equitably.

The Report establishes that even relatively poor countries could significantly advance human development by readjusting existing

36. World Bank, World Development Report, 1992: Environment & Development (Washington D.C., 1992).

37. United Nations Development Programme, Human Development Report 1991 (New York: OUP, 1991), p.14.

spending away from the military and public enterprise. This would free an estimated 50 billion dollars for priorities in human development - a sum equal to nearly the total amount for international assistance in 1988.³⁸

The figures indicate that the agenda for sustainable development in the South would need to regain control of its ecological resources to meet domestic needs, eliminate long-term dependence on financial aid and achieve access to beneficial technologies controlled by the North. Sustainable development needs to cover wide-ranging areas ranging from international trade, ecological infringement, agriculture, industry and even the operations of the transnational corporations.

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In order to aid the conservation process, a new measure undertaken by conservation organisations involves "debt-for-nature swapping".³⁹ The acquisition of debt by these organisations is at a discount and its redemption in local currency has been used mainly to protect biological diversity and forests. The first debt-for-nature swap occurred in July 1987 when the Washington-based Conservation International purchased \$650,000 of Bolivia's commercial debt. In exchange, Bolivia agreed to demarcate 3.7 million acres of tropical forest as a protective area and establish a \$250,000 fund in local currency to manage the Beni Biosphere Reserve. In December 1987, the World-Wide Fund for nature (WWF)⁴⁰ concluded an even larger debt-for-

38. *ibid.*, p.4

39. World Wildlife Fund Letter, "Debt-for-Nature Swaps: A New Conservation Tool, no.1, 1988, Washington D.C.

40. In response to the importance of biodiversity and environmental issues, the World Wildlife Fund (WWF) has widened its frontiers by changing its name to World-Wide Fund for Nature.

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nature swap for Ecuador for \$10 million which would then be converted into local currency bonds and used to finance a variety of local conservation projects. On maturity, in nine years time, the principal of the bonds would become an endowment for Fundacion Natura, Ecuador's leading conservation organisation. Similar arrangements have also been concluded with Costa Rica. Though limited in potential, such measures are a beginning in helping to solve the debt crisis.⁴¹

Owing to the foregoing trends, there was the need felt to recreate economic, social and security structures to reflect new thinking over ecological, social and cultural costs and benefits that were a part of both the United Nations Conference on Environment and Development (UNCED) held at Rio de Janeiro in June 1992, with the parallel on-going Summit at the same place for NGOs, ECO'92. The Conference highlighted the sharp differences between the developed and developing countries on almost every major issue, including the ineffectiveness of the Convention on Climate Change and the Biodiversity Convention that were passed at the Summit. The former was diluted by the refusal of the United States to set a fixed time-table on reduction of its greenhouse gas emissions while the latter was met with stiff resistance from developing countries that feared erosion of their gene banks.

Difficulties also existed with the wording of the Earth Charter and the financial mechanism of Agenda 21. The Global Environment Facility (GEF) which was institutionalised as a result of this established four priorities in addressing environmental

41. "Third World Creditors give Debt Equity Swaps a Try", Wall Street Journal, 11 June 1987.

issues - reduction in greenhouse gas emissions, protection of biodiversity, reduction of pollution of international waters and reduction in ozone layer depletion. It would be jointly administered by the World Bank and the United Nations Environment Programme though its mechanisms are still to be clearly defined.

Perhaps the success of the Conference lies in its articulation of the biggest issue of the decade - the need for concerted global action to ensure preservation of the earth's resources so essential for human survival, and to work towards eradication of the pollution problem at source. These challenges can be best met through a holistic policy of environmental management as present in the 1980s and expressed on the following principles by Mostafa K. Tolba:⁴²

- (i) Economic and social development must be pursued to meet the basic human needs of all people and secure better prospects for them;
- (ii) Environmental processes must be thoroughly and widely understood;
- (iii) The productive capacity of the environment must be maintained and resources be used rationally.

Only then can a beginning be made to realise the Pledge to make the Earth a secure and hospitable home for present and future generations.

42. Mostafa Kamal Tolba, Development without Destruction: Evolving Environmental Perception (Dublin: Tycooly International, 1982), p.57.

Recent key international Conventions for environmental legislation and West European interest

The growing importance of environmental issues in the perception of nations can be seen in the number of international treaties and agreements signed following the Stockholm Conference. A UNEP register⁴³ lists 58 agreements in the period 1971-83 alone, out of a total of 108 agreements by 1984. Four of the most decisive agreements on the environment were signed in the period 1971-79. These were the Wetlands Convention (signed on 2 February 1971 and enforced from 21 December 1975), the World Heritage Convention (enforced from 17 December 1975), the Convention on International Trade in Endangered Species (signed in Washington on 6 March 1973 and enforced from 1 July 1975) and the Migratory Species Convention (signed in Bonn on 23 June 1979 and enforced from 1 November 1983). The European Community is a signatory to the first two but the Convention on International Trade in Endangered Species (CITES) needed an amendment to the text to make it possible to include the European Community. The Council authorised the Commission to open negotiations on 15 March 1977, and in 1983 the Executive body of the Convention voted on an amendment to the text, making it possible for the European Community to be a party thereto. However, as the necessary number of ratifications to the Convention have not been achieved, the Community is not an effective participant to the Treaty.

43. United Nations Environment Programme, "Register of International Treaties and Other Agreements in the Field of the Environment" (UNEP/GC/INFO/11) Nairobi: UNEP, May 1984.

The above four agreements can be used to illustrate the weaknesses inherent in international treaties and multilateral agreements. There is the problem of enforcement (as experienced with the Wetlands Convention) and lack of administration has led many agreements to become "sleeping conventions". A second weakness is structural. The complexity of many treaties (such as the Convention on long-range transboundary air pollution) makes their contents less precise and more difficult to bring to effect.⁴⁴ A final difficulty with an agreement is in transforming its principles into national law and then implementing them. Where treaties such as CITES depend on domestic law for their implementation, there is often a difference between what is agreed in negotiations and what is subsequently found acceptable by national parliaments.

In enforcing international agreements, regional organisations are at an advantage since they can exert moral pressure on national governments and provide administrative continuity. Western Europe has a number of governmental and non-governmental organisations concerned with environmental issues - such as the Nordic Council, UN Economic Commission for Europe, the OECD and various Green parties, to give a few examples. Within the region, the Europeans have been fairly successful in agreeing on problems such as air and water pollution and waste management. In 1989, the EC agreed on pollution control standards for vehicles as well as on a programme to cut sulphur emissions, a major cause of acid rain. The European

44. Stanley P. Johnson, Guy Corcelle, The Environmental Policy of the European Communities (London: Graham and Trotman, 1989), pp.301-308.

Community has evolved a fairly positive environment policy with a series of Community directives and Action Programmes and plays a determining role within the region.

There are a number of international conventions in the area of water pollution, air pollution and protection of flora and fauna, to which the Community is a signatory. These include the Paris Convention for the Prevention of Marine Pollution from Land-based Sources (1974), the Law of the Sea Convention (1982), Maritime Convention on the Safety of Shipping, the Geneva Convention of Long-range Transboundary Air Pollution (1979) and the 1985 Convention of the Council of Europe on the Protection of Vertebrate Animals used for Experimental Purposes.

An issue over which the Community played an active part was in the signing of the March 1985 Vienna Convention on the Protection of the Ozone Layer. Following the 1985 Vienna Protocol, the Community was also present at the Final Agreement in Montreal on 17 September 1987, when 56 countries drew up an agreement. This was to freeze consumption of the five most common types of CFC in 1990 at 1986 levels, followed by reductions of upto 50 percent by the year 2000. The Community decided to go further, perhaps in the realisation that the member-states of the EC are responsible for more than one-third of world-wide CFC production. At a meeting in March 1989, the 12 EC countries agreed to cut production of CFCs by 85 percent as soon as possible, and eliminate them by the end of the century.⁴⁵

45. Craig Whitney, "Twelve European Nations to Ban Chemicals that Harm Ozone", New York Times (New York), 2 March 1989, p.1.

Environmental intervention by the European Community has been successful due to the realisation that pollution on the continent and elsewhere is not limited by frontiers and political boundaries. There is also the factor that environmental standards fixed by the EC member-states affect the international competitiveness of its industry. Further, existing structures of consensus building in Europe and the institutions of the Community - such as the Parliament at Strasbourg which has been responsive to pressure from interest groups, has given the Community a dynamic role within the region. This would be discussed in detail in the subsequent chapter.

A survey of the global environmental challenges thus enables us to identify the following areas of common concern:

First, the growth of the global environmental movement has been precipitated by a number of factors in the last decade indicating more than ever the level of global interdependence and the limitations of the natural resource base. Major conflicts involving arms aggression and environmental degradation caused by heavy industry have also highlighted the fragility of the ecosystem.

Secondly, there is a need for a fresh definition of international political, economic and social relations in order to realise the goals of social justice and sustainable development. The proliferation of the environmental movement into activist groups and those securing political representation, as with the Green parties, in a way facilitates their realisation. However, it is equally important to expand the parameters by which international financial and multilateral institutions define development and its

consequences. This became particularly evident at the conclusion of the Rio Summit and the major issues thus raised therein.

Thirdly, a brief overview of recent key environmental conventions signed and the involvement of Western Europe shows the difference in the time period between signing of an accord and its enforcement. These legal mechanisms form a vital part in ensuring international action on a specified area.

CHAPTER TWO

EVOLUTION OF COMMUNITY ENVIRONMENTAL POLICY

The twelve member-states of the European Community - Belgium, Germany, Denmark, Greece, Spain, France, Ireland, Italy, Luxemburg, the Netherlands, Portugal and the United Kingdom - recognise that environmental concerns are not only a priority but are also inseparable from most other policy areas.¹ Added to this is the awareness of the globalisation of environmental issues and the need for the Community to be involved in environmental protection beyond its frontiers, which will be discussed briefly in this chapter.

The Treaty of Rome (March 1957) makes no mention of an environmental policy. Only two articles in the Treaty offer a link with the environment. Article 2 expresses a general preoccupation with a quality of life, referring to "harmonious" development of economic activities and "balanced expansion". Article 36 allows for continuation of banning or restriction of trade for reasons of public health and protection of animals and plants.

The initiation of the European Community's environmental programme occurred at the 1972 Paris Summit meeting of the EC Heads of State and Government. The impetus for this was the realisation that preoccupation with economic stability had caused inequalities in living conditions within the Community which had negative environmental implications. It was felt that economic expansion

1. European Documentation, Environmental Policy in the European Community (Luxembourg: Official publication of the European Communities, March 1990), pp.1-42.

should not be an end in itself but result in an improved quality of life.

From these beginnings and through the 1970s, the Community has been able to establish and put into practice a substantial and sound environmental policy. With the drawing up of the "Single European Act" in 1985 which revises the EEC, European Coal and Steel Community (ECSC) and Euratom treaties, a special place was devoted to the environment under Title VII. It consists of three articles.² Article 130r establishes the objectives, principles and conditions of implementation of the Community's action on the environment. These are:

- to preserve, protect and improve the quality of the environment;
- to contribute towards protecting human health;
- to ensure a prudent and rational utilisation of natural resources.

Article 130r, para 2, clarifies the main components of the policy, "Action by the Community relating to the environment shall be based on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source, and that the polluter should pay. Environmental protection requirements shall be a component of the Community's other policies."

Article 130s specifies the decision-making procedure within the Community. The European Council of Heads of State and Government can decide on action to be taken by the European Community on the basis of a proposal from the Commission, and after consulting

2. Ida Johannes Koppen, The European Community's Environment Policy from the Summit in Paris, 1972, to the Single European Act 1987 (E.U.I., Florence, 1988), p.25.

the European Parliament and the Economic and Social Committee. The decisions are to be taken on the basis of a qualified majority.

The final article, Article 130t, specifies that measures taken by the Community in no way prevent a member state from maintaining or introducing more stringent measures, to the extent that they are compatible with the Treaty. Hence, the inclusion of the environment in the new treaty is an official recognition of the Community's responsibility in the area of environment.

The Maastricht Treaty on European Union signed by the twelve member-states on 7 February 1992 extends the Community's environmental policy to include the goals of sustainable growth and the resolutions of global environmental problems.³ The Treaty also incorporates the principle of subsidiarity. This means that the Community would act collectively on environmental matters only where the objectives could be better attained through joint action rather than individual efforts by member-states. With the Danish Parliament refusing to accede to the Treaty recently, the European Union movement appears to have received a setback. However, with frantic attempts at conciliation among the twelve, there is every likelihood that the Treaty could be saved and its clauses put into effect.

To be realistic in an assessment of the EC's new environmental policy, one must know all the directives as well as type of legislation, and evaluate each of them. This is impractical since each legislation can produce volumes of work. Compared to other

3. Commission of the European Communities, "Report from the Commission of the European Communities to the United Nations Conference on the Environment and Development, Sec 91 (2448) (Brussels), 20 March 1992, p.152.

organisations, the EC has the only supranational environmental programme, but there has been little effort to monitor the effects of various legislations in the working of the twelve member-states. Due to such factors, an analysis of the Community's environment policy would be possible only through an over-view from which broad conclusions could be drawn.

Framework for the Community's Internal Environmental Policy:

The European Communities' "Action Programmes" on the environment provide a basic reference charter for the policy.⁴ The first programme (1973-76) defined the principles and objectives of Community environment policy, and the actions to be carried out in different sectors. The second programme (1977-81) followed on and specified the general actions within the framework of the first programme. The third programme (1982-86) established the priorities for action and introduced some new concepts - for example - integration of the 'environmental' dimension in the other policies such as industry, market, health and quality of life as well as the need for a preventive approach to environment policy. The fourth action programme (1987-92) develops a number of new ideas and principles in the areas of enforcement of environmental directives, implementation of a true environmental education and information policy, and new initiatives in sectors like biotechnology, natural resources and soil protection.

4. Commission of the European Communities, Ten Years of Community Environment Policy (Brussels), March 1984, p.12-16.

These action programmes are part of the political framework constituting Community environment policy. Even under the "internal market" chapter of the Single European Act, there are clauses concerning protection of the environment. According to the new Article 100A⁵ on the functioning of the internal market, all measures contributing to the establishment and functioning of the Common Market are to be adopted as decisions by the Council on the basis of qualified majority. This is because many of the environmental protection measures have consequences directly linked to the functioning of the internal market⁶ - such as the directives establishing product standards for lead in petrol, sulphur in gas, and so on. Article 100A also gives members the right, after the adoption of a harmonisation measure by the Council through a qualified majority, to supply more severe national provisions for environmental protection. This clause was imposed by the Danish government which clarified that national measures should not constitute a disguised form of protectionism, but be based solely on higher requirements for environmental protection. Finally, the framework of Article 100A, provides for some enhanced powers for the European Parliament.

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5. The former Article 100 is the basic article bringing together the laws of the member-states which affect the functioning of the Common Market. It provides a link between economic and environmental policies.
 6. Commission of the European Communities, Task Force Report on the Environment and the Internal Market, 1992: The Environmental Dimension (Brussels, 1988).

This new treaty under the 'Single Act' came into force in July 1987, hence it is early to judge its consequences for Community environment policy. There also appears to be some degree of confusion over whether Article 100A, allowing decisions to be taken on the basis of qualified majority would prevail, as against the general rule of unanimity provided for by Article 130r.

Whatever the framework and legal interpretations on the environmental provisions in the new treaty, practice alone would enable an objective assessment of its implications for environmental policy. However, to clarify the main areas of Community concern over environmental conditions, a brief look will be taken in the following areas - air pollution, water pollution, and toxic and hazardous waste:

(i) Air Pollution - The efforts by the EC to combat air pollution consists of directives which regulate the sources of air pollution, limit the amount of harmful substances, and that place empirical limits on the concentration of certain air pollutants.

According to the Commission, motor vehicle emissions account for half of all man-made air pollution within the Community.⁷ Attempts to regulate such emissions have been done through monitoring the motor vehicles themselves and the content of their fuel. Another approach used by the EC to control air pollution has been through ambient air quality standards established for lead, sulphur, dioxide, nitrogen dioxide, and suspended particulates.

7. Commission of the European Communities, State of the Environment Report, 1986 (Brussels, 1986), p.151.

However, the principle of 'optional harmonisation' used by the EC means that there is no positive regulation by the EC for such emissions. This, in turn, reflects in the varying standards of the twelve member-states. For instance, only Denmark, the Netherlands and Germany have widely available unleaded fuel.

Apart from trying to limit these gases emitted by the combustion of fossil fuels, the Community is also faced with the problem of limiting the amount of chlorofluorocarbons produced by aerosol cans. The United States and the EC are said to jointly discharge the largest number of CFCs into the air. On 2 March 1989, the Council of Environmental Ministers committed the member-states to banning the use of CFCs by the year 2000 as well as reducing their level to 85 percent as soon as possible.⁸

It remains to be seen how far this would be enforced. While an increasing number of safeguards are being implemented by the Community, curbing 'air pollution' cannot be classified as a 'success' story.

(ii) Water Pollution - Combating water pollution has been given a priority within the European Community and is a field that has been comprehensively legislated. The directives fall into four main types - regulating the clean-up and to prevent dumping of dangerous substances; establishing objectives for water quality required; regulating industrial processes known to introduce pollutants into the water; and attempts to control and limit marine pollution.

8. The New York Times, 3 March 1989, p.1, col.6.

A heated debate exists over some aspects of EC water pollution legislation. The most prominent is with a 1976 directive limiting the emission of dangerous substances into the water. The dangerous substances are divided into two annexes of a "Black list" (in which polluting substances must be eliminated) and a "Grey list" (in which the substances can only be discharged in limited quantities).⁹ Eleven of the member-states wanted standards for the above to be determined through Uniform Emission Standards (UES) with fixed quantifiable limits. The dissenting opinion was of Great Britain which insisted that the EC set Environment Quality Objectives (EQO), allowing superfluous substances to be emitted as long as the concentration levels did not harm the environment or health. This benefited the U.K. since its fast-flowing rivers could carry the pollutants out to sea and the cost of compliance to environmental standards would be less. The EC resolved the differences through adopting 'alternative harmonisation' - a member-state could comply either with the UES or EQO.¹⁰

When the area of jurisdiction is outside the legislation of the Community, the EC handles its differently. For example, control of pollution on the seas is handled through Council decisions which guarantee that the EC countries will adhere to international conventions and treaties. The EC is also part of

9. Cynthia Whitehead, ed., European Community: Environmental legislation 1967-87 (Brussels, 1988), p.9

10. Ibid pp.8-14.

an international advisory committee to handle oil spills, provide information on hydrocarbon pollution, and is a signatory to the Rhine Convention.

(iii) Toxic and Hazardous Waste - Disposal of hazardous waste is an area in which the Twelve have been able to make substantial progress, the impetus being the landlocked nature of the European continent. The directives were inspired by a major industrial disaster at Seveso (Italy) in 1976 when a factory exploded, spreading dioxin-contaminated wastes. In 1983, outrage was caused when barrels of these same wastes were discovered in a barn in Northern France. The Council passed the post-Seveso directive in 1983,¹¹ asking one member to notify another in case of an accident. In 1984, the Council passed a directive on transfrontier shipment of hazardous wastes, defining proceedings for member-states to restrict or prohibit shipments coming into their borders. The directive also regulates the waste going into and coming out of the EC.

However, the deficiencies in the directive¹² reflect the difficulties in legislating the area of hazardous waste. It does not establish routing provisions which ensures that the waste travels along fixed routes which would make monitoring measure. It does not deal with liability in the case of violation of these

11. *ibid*, n.1, p.36.

12. Mary Elizabeth Kelly, "International Regulation of transfrontier hazardous waste shipments: A New EEC Environmental Directive", Texas International Law Journal, vol.21, Nov. 1985, p.10.

laws or provide adequate insurance to cover potential damage. The biggest loophole is lack of a fixed definition for what constitutes a hazardous substance - which each member deciding the concentration of hazardous substances that pose a health problem.

The need for legislation in this area is a priority. According to a recent study,¹³ Europe produces 40 million tons of waste annually, of which the 12 EC countries produce 25-35 million tons. Approximately 10 percent (3.5 m.tons) of such waste, constituting approximately 100,000 transboundary movements, crosses national boundaries. The Community has made every effort to regulate such movements, and signed the Basel Convention on Control of Transboundary Movements of Hazardous Wastes and their disposal in March 1989. The Convention places strong curbs on the shipment of such hazardous waste and is an indicator of the new direction for legislation on toxic and hazardous wastes.

An over-view of the policy for air pollution, water pollution and toxic and hazardous wastes indicates that the Community does have the will-power and concern to pass extensive legislation on environmental issues. This has enabled environmental policy to come into its own with the Single European Act of 1985. The goals the EC has set for itself in the Single European Act and Four Environmental Action Programmes are towards harmonisation and amelioration of the EC's environment. A definite stance has been taken for amelioration of the Community's environment. This is

13. S.Gosset, "Les dechets dangereux en droit international de l'environnement" (1990). Unpublished. (Doctoral thesis, Universite Robert Schuman of Strasbourg). Cited in Craig Reid, "The Environmental Policy of the European Community: A Policy Unsure of itself", Towson State Journal of International Affairs, April 1991, p.52.

evident in the special projects towards less developed areas of the Community, such as the Mediterranean region which receives environmental assistance under the MEDSPA Programme. However, harmonisation of all the policies of member-states has not succeeded though the Community has made definite efforts to create a healthy environment while retaining the objective of economic growth. For data collection, the Community has initiated research projects such as CORINE (Coordinated Information on the Environment).

The Commission has also proposed a programme of Environmental Impact Assessment (EIA) in 1980, which is still in its infancy. The EIA directive was finally passed in 1985 with all of the members to comply by 1988.¹⁴ Groups must submit an environmental impact assessment when building projects so large that are sure to have definite impact on the environment. This would help integrate environmental protection into other areas of Community policy.

The International Dimension of Environment Policy:

In studying the evolution of Community environment policy, it must be noted that the emergence of the 'international dimension' and the Community's concern with environmental standards in other countries is a recent development. The inception of the Community's environmental policy at Paris in 1972 was influenced by the 1972 Stockholm Conference on Environment and Development. Since then, the Community has not failed to continue shaping its

14. *ibid*, n.7, p.88.

policy in response to the international environmental dialogue. The Third Environmental Action Programme of 1983 has introduced environmental protection as part of its development aid policy. The need for sustainable development can also become a part of the Community's environmental perception. A recent document 'Towards Sustainability' has emphasised the links between "global concerns about the climate change/deforestation/energy crisis (and) the seriousness and persistence of problems of underdevelopment". The document has asserted, "We recognise our special responsibility for the environment both to our own citizens and the wider world".¹⁵

In its partnership with the Lome Convention countries, the Community has included specific environmental clauses in Title I of the Lome IV Convention. The priorities in the Community's action are the fight against desertification, rational use of water resources, urban-rural balance, preservation of tropical forests and biological diversity.

The Community has extended its participation by being a legal contracting party to several international agreements for environmental protection and conservation. Other forms of agreement also exist such as the special declaration on environmental cooperation between the EEC and EFTA countries, formalised in the Merdurjk Declaration of 1987.

15. Cited in Norman Myers, "The Environmental Consequences for the European Community of Population Factors Worldwide and Within the Community" (Oxford, May 1992), p.66.

The Community's environmental policy within its boundaries has thus evolved on parallel with its extension to the international arena. To understand this better, it is necessary to take a look at the structure of Community decision-making and the role of the different institutions of the Community.

II

Community Decision-making and Environmental Policy:

Decision-making authority in the European Community lies with its Commission and Council of Ministers, with the European Parliament enjoying enhanced powers through the "cooperation" procedure of the Single European Act (SEA) and "co-decision" under the Maastricht treaty. However, in the environmental domain, the division of powers works differently.

Within the EC Commission itself, a directorate-general (namely Directorate-General No.XIII) has been assigned the task of managing "environment, consumer protection and nuclear safety". But environmental protection is an area that acts across the boundaries of various directorates-general. It is the subject of a regional development programme conducted by Directorate-General XVI, as well as the main activity of Directorate-General XIII (Environment).

The Commission of the European Community:

Action at the Community level is initiated by the Commission which is the administrative arm of the EC with a specified role as guardian of the treaties, initiator of policy proposals and mediator of disputes. The Treaty of Rome specifies that the Commission is responsible for ensuring that Community law is properly implemented and for referring cases of dispute to the European Court of Justice.

With regard to environmental policy, majority of the measures take the form of directives which bind member states to the result while leaving open the means to be used, such as the directives overcurbing sulphur dioxide and dioxide emissions. Due to the number of such directives passed by the Council, monitoring of the texts assumes importance. The complaints and infringements detected by the Commission's inquiries came to 192 in 1986, as compared to 25 in 1978. With regard to the most extensive legislation, the environment ranks third, after industrial affairs and agriculture.

This makes the monitoring of the Community environment law a matter of priority for the Commission, which carries out two types of checks.¹⁶ The formal check is on the integration of Community directives into national law, and to ensure that national measures comply with the formal and practical requirements of Community law. The second type of check is on the practical

16. Emile Noel, Working Together: The Institutions of the European Community (Luxembourg: Official Publications of the European Communities, 1988), p.7.

implementation and effectiveness of the directives. This is carried out under Article 155 of the EEC Treaty as well as specific national reports on the implementation of the directives which are sent periodically by the member-states to the Commission. If required, the Commission can enter into infraction proceedings against the member-state through Article 169 of the EEC Treaty. After considering the view-point of the member-state, the Commission draws up a "reasoned opinion". If the member-state still fails to conform, it can be taken before the European Court of Justice and charged under Article 171 of the EEC Treaty. There are a number of gaps in the states' implementation of environmental directives - whether through delay in incorporation into national law or in their implementation. It is an area in which the Commission needs to exercise greater authority not only by intensifying legal action but by increasing dialogue with the national administration and mobilising public opinion.

The Commission has also been a signatory to several international environmental protection treaties, having the authority to negotiate for the Community on matters of global significance. The Commission has negotiated the nuclear accident treaties of 1986. Based on the outline communication of the Commission of 16 June 1986, these were in the areas of emergency procedures, health protection, operational safety of installations, international action, and research programmes.

Financially, the Commission has an annual environment budget of 30 million ECUs. This is a very small part of the Community annual budget, amounting to less than 0.001 percent, but member-states are expected to raise their own contributions.¹⁷

European Council of Heads of State and Government:

This is the highest political authority in the Community. The Commission may have the responsibility for initiating proposals but it is the European Council that has to pass them. The Council has played a vital role in the decision-making framework. In 1983, the Stuttgart European Council (under the German Presidency) underlined the need to reinforce action against environmental pollution. At its Brussels session held in March 1985, the Council stated that environmental protection should become a fundamental part of other Community policies. It is again the European Council that launched the "European Year of the Environment" in 1987-88. At the Rhodes meeting of the European Council on 3 December 1988 (under Greek Presidency) the European Council adopted a 'Declaration on the Environment'. A section of this declaration re-defined the goals of environmental protection with the emergence of the Single market, and defined sustainable development as an "over-riding objective" of Community policy. Such an impetus from the highest level is encouraging but it remains to be seen how successfully it can be translated into practical policies.

17. Stanley P. Johnson and Guy Corcelle, The Environmental Policy of the European Communities (London: Graham and Trotman, 1989), p.20-31.

Decision-making requires the unanimity of the members of the Council, and not a qualified or simple majority. This legal requirement has influenced Community environment policy since the need for unanimity has led to the search for a compromise or else resulted in an impasse. This problem has not been alleviated in the new Treaty which retains unanimity as the basis of decision-making. The exception is over proposals that contribute equally to the realisation of the internal market, where decision can be taken on the basis of qualified majority.

European Parliament and Interest Groups:

The powers of the European Parliament are limited since it cannot pass resolutions on environmental issues on the basis of a qualified majority. Such issues are restricted to the internal market, social policy and research. However, under Article 100a of the Single European Act, there is a new procedure for intervention and cooperation with the European Parliament. This allows the Parliament to influence the Council's decision more directly, with the understanding that the final decision rests with the Council.

The strong environmental lobby in the European Parliament is led by the Green parties which secured more than thirty seats in the June 1989 elections, making them the fifth largest grouping at Strasbourg. The Greens have also played an important role in politics in West European countries. Apart from the European Parliament, by 1988, 104 Green representatives sat in eight national assemblies, and hundreds were in regional, local and

municipal assemblies.

The success of this structure of decision-making framework between the Commission, Council and Parliament can only be measured through the position of the member-states with regard to Community environment policy. The member-states most advanced with regard to environmental protection are - Germany, the Netherlands, Denmark - and they have often lobbied for stricter environmental standards by the Community. Countries that can be classified as 'neutral' with respect to the EC's policy are France, Luxembourg, Italy and Belgium. Finally, member-states such as the United Kingdom and Ireland have protested with regard to over-harmonised Community solutions in environmental matters. An example is the conflict between "emission norms" and "quality objectives" on the issue of water pollution which placed the United Kingdom in opposition to all other member-states. For newer members like Spain and Portugal, it is too early to commit a stand, though their economic situation would make it difficult for them to sustain a level of strict environmental standards.

Recently, Parliament initiated a motion for a resolution on the implementation of EC environmental legislation.¹⁸ Parliament had drawn up a series of guidelines for the Commission, mindful of complaints regarding non-compliance with environmental legislation. Recognising the difficulties faced by certain member-

18. European Parliament, Session documents, A3-0001/92, 6 January 1992, Report of the Committee on the Environment, Public Health and Consumer Protection on the implementation of European Community's environmental legislation (Luxembourg), pp.4-6.

states in the application of environmental law, Parliament nevertheless urged the Commission to increase its number of infringement proceedings. These should occur with a check not only on formal non-compliance but also on instances of non-compliance connected with implementation in individual countries. Parliament further urged that the financing of projects under schemes such as the European Regional Development Fund (ERDF) should not take place without compliance to the directive on Environmental Impact Assessment.

The basic problem of harmonisation of Community environment policy and the means to enforce and safeguard this is recognised at different levels in the Community. However, the EC has the experience to incorporate this into the Community decision-making framework through mechanisms to safeguard the implementation of its environmental policy.

III

Proposals for Community Environment Policy:

Compared to other Community policies and despite its limitation in coordinating the interests of different member-states through the principle of unanimity, the Community environment policy is successful. In fifteen years, over 100 legislative acts

have covered diverse sectors.¹⁹ It is also a policy that has now come into its own, as evidenced in the Single European Act. A broadening of its field of activities is a definite future prospect for the environment policy. The environmental dimension would also play a role in the completion of the internal market. Finally, within the Community, it would be important to note the degree of success in the implementation of the new Treaty.

Integration of Environmental Protection into other Community policies:

The Treaty of Rome (as amended by the Single European Act) provides under Article 130r that environmental protection requirements shall be a component of the Community's other policies. The integration of environmental consequences in agriculture is an area covered in some detail. In 1985, the Commission brought out a greenbook on "the perspectives of the Common Agricultural Policy" which paid attention to the environmental problems caused by modern farming techniques. Concern has been expressed over the extensive use of fertilizers and pesticides which risk damaging water supplies through pollution by nitrates. The problem arising from intensive livestock production needs to be considered with a view to ensuring fair conditions of competition. Efforts are also being undertaken to promote 'environment-friendly' measures - for example, abandonment of drainage or irrigation works or change of land use for other production.

19. *ibid*, n.7, p.2.

In the industrial policy and social policy - regional development, energy, transport and consumer protection, integration of environmental problems needs to be more widespread. In order to increase public awareness over difficulties in this field, as well as possible solutions, the Council and Ministers of Education meeting in the Council on 24 May 1988, adopted a Resolution on environmental education. These objectives are to be promoted both at the level of Member states and at European Community level through which the process of integrating environmental protection into other policies can be enhanced.

Completion of the Internal Market and the Environmental Dimension:

The measures to implement the Single Market include - the removal of border checks, harmonisation of technical standards and regulations, fiscal harmonisation, reduction of market entry barriers, and the opening of public procurement. The lifting or modification of these barriers could create a number of additional environmental pressures. There is a risk of waste caused by large-scale tourism, the circulation of products originating in countries without stringent product controls, and proposals for tax harmonisation which could limit fiscal measures for environmental management and pollution control.

Transport, with its emissions of sulphur dioxide, carbon dioxide and non-methane hydrocarbons is a major source of

air pollution. Activity in the transport sector is likely to be stimulated by the Internal Market and it is estimated that there would be an increase in transfrontier lorry traffic of between 30 percent and 50 percent.²⁰ The expected increase in atmospheric emissions would have environmental consequences.

There is concern within the Community that the economic growth stimulated by the Internal Market should not give rise to an adverse environmental impact. To reduce this, it is important to introduce incentives, such as higher prices or regulations that would reflect the scarcity of natural resources and lead to higher economic efficiency. Such a link is evident between energy consumption and economic growth.

The environmental dimension can be enhanced in the process of economic development through the introduction of 'market-friendly' and 'environment-friendly' technologies. This would involve the re-structuring of industry for the integration of clean technologies into the production process. The market pricing of the product would contain additional charge for financing such pollution control measures.

The environmental dimension of the Community rests on the basic principle of prevention of irreversible environmental damage. Added to this is the principle of economic efficiency and cost-effectiveness in securing environmental protection goals.

20. *ibid*, n.6, Conclusions of the Report, p.V

Toward this end, the 'subsidiarity principle' would enable decision-making competence to rest with the lowest-possible level in the political hierarchy, facilitating its implementation.

It is generally accepted that the Community has a role in ensuring that every citizen enjoys a "minimum acceptable standard" of environmental quality. Hence, in order to cut down the problem caused by emission sources, the Community should enforce the "Polluter-Pays-Principle" or have the option to relocate industry. Integrated or "clean technologies" should also be promoted.

In the international dimension, the Polluter-Pays-Principle (PPP) is gaining in importance. The PPP covers a wide range of costs which include (i) the costs of pollution control of individual facilities (ii) the costs of collective measures on behalf of a group of polluters and (iii) associated administrative costs.²¹ Further, the Polluter-Pays-Principle is being used to enforce legal responsibilities for accidental pollution and waste liability, such as the European Community's adoption of a directive in 1990, "Civil liability for damage caused by waste".²² The liability aspect of the extended PPP needs to be taken into consideration in the Community's policy.

21. Sanford E. Gaines, "The Polluter-Pays-Principle: From economic equity to environmental ethos", Texas International Law Journal, Summer 1991, p.415.

22. Proposals on Civil Liability by Thirteen International Environment Representatives, Research approved by Parliament after amendments, 500-01 (1990).

In the evolution of the environment policy, the Community thus needs to respond to the global issues of environmental protection (including CFCs and climate change), regional issues (such as problems faced by the Mediterranean countries) and the challenges facing the developing countries, where there is a need to promote 'sustainable development'. The Community has to ensure that the 'coming together' in the internal market and the implementation of the 'Single European Act' become an appropriate forum for member-states to tackle these issues.

The evolution of the Community's environmental policy thus incorporates certain unique and specific features.

Firstly, the EC's progress in environmental policy from the Treaty of Rome to the Maastricht Treaty reflects a continuity in its concern that a high environmental standard should contribute to a high quality of life, health, prudent use of natural resources and balance of economic activities. A basic reference charter for this policy has been provided through four Action Programmes on the environment from 1973-92.

Secondly, with the integration of the Single Market, four important principles need to be implemented into a new environmental policy. These are the 'prevention principle', 'polluter-pays-principle', 'subsidiarity principle' and the principle of 'economic efficiency and cost-effectiveness'. The environmental dimension needs to be integrated into other aspects of Community policy.

Thirdly, Community decision-making on the environment is divided between the European Commission, Council of Heads of State and Government and European Parliament, with the Council playing a vital role in the process. Within the Community, a priority is on amelioration and harmonisation of Community policy which has yet to be successfully realised. The Community plays a dynamic role in its international policy though the repercussions of the Internal Market on specific areas, such as industry, is yet to emerge. On the whole, the Community's environmental policy can be regarded as a success story.

CHAPTER THREE

ENVIRONMENTAL DEGRADATION IN CENTRAL-EASTERN EUROPE AND THE EUROPEAN COMMUNITY'S RESPONSE

The revolutions of 1989 set the stage for transformation of the political and economic structures of the east European economies. The agenda of the new democratic leadership is dominated by the need not simply to reverse the former policies but to fundamentally alter the economy to respond to challenges. One of the biggest is undoubtedly the challenge to 'clean up' the environment and pursue a policy of environmental protection. This is made more difficult by the current preoccupation after the revolutions in Eastern Europe to reach the same living standards as those in the West - irrespective of the pollution costs in achieving such a growth rate.

If the West and, in particular, the European Community (EC) is in a position to respond with financial and technical assistance in the area of environmental protection, this is due to the political will manifest in these countries. In Central-Eastern Europe, the concern with environmental issues can be definitely traced to the decade beginning in the 1980s. The ecological movements which sprang up became part of the pressure groups questioning the legitimacy of the erstwhile Communist regimes. The environmental movement in Hungary was led by the 'Danube Circle'. The movement also consisted of several small Green parties with the Independent Ecological Centre serving as a resource group. By providing the public with facts that were

considered classified, they were able to challenge the Communist regime's monopoly over information.¹ This played a large part in the political victory of the democratic coalition that came to power in Hungary. In Poland, the Solidarity movement had a strong environmental component which is still present after its victory in the elections. The Polish Ecological Club was formed from Solidarity in the early eighties. The country has several Green parties and more than forty groups such as the Green Federation and the Franciscan Ecological Movement. In the Czech and Slovak Republic (CSFR), official environmental groups were allowed to exist under the old regime - the 'Czech and Slovak Unions of Nature' and 'Brontosaurus', which are now independent. The ecological group 'The Green Circle' now functions as an umbrella organisation for three major groups and thirty smaller ones.²

It is this lobbying by pressure groups and interest groups as well as the influence exerted by multilateral aid-giving agencies that has made environmental protection a priority in the policies of the new regimes in Central-Eastern Europe.

The Extent of the Environmental Degradation and the Agenda for Action:

A study of the environmental problems faced in these

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1. See Stanley J.Kabala, "The Environment: Adjustments to a new reality", Report on Eastern Europe, vol.2, no.2, 11 January 1991, pp.14-17.
 2. Hilary F.French, "Green Revolutions: Environmental Reconstruction in Eastern Europe and the Soviet Union", The Columbia Journal of World Business (New York), vol.26, no.1, Spring 1991, p.38.

former socialist countries is necessary to understand the nature of the problem and priorities in the policy for change.

Poland

The major source of environmental pollution in Poland is from the energy sector. Poland has a very high consumption of primary energy relative to its Gross National Product (GNP). The 1989 World Development Report figures for GNP in US dollars per person indicate that in 1987, Poland's use of energy amounted to 1.75 kg of oil equivalent (koe) per US dollar of GNP.³ This is higher than most countries, including Hungary which has a value of 1.37 koe per US dollar.

In addition to this high energy intensity, Poland is more dependent upon coal as its primary source of energy than other countries. In 1985, coal accounted for 82 percent of the country's primary energy use. In the commercial and residential sector, coal accounts for almost 80 percent of fuel use in Poland whereas its equivalent share is less than 15 percent in all West European countries.⁴

With regard to air pollution, the most serious problems are caused with the emission of particulates due to the burning

3. Unpublished manuscript, G.A.Hughes and J.Cofala, "Energy market development in Poland", The World Bank (Washington D.C.), 1989.

4. G.Hughes, "Energy Policy and the Environment in Poland" in European Economy: Economic Transformation in Hungary and Poland (Brussels), no.43, 1991, p.154.

of coal in small boilers in district heating plants and small-scale industry without pollution control equipment. Individual coalfires used for heating apartments and houses are an important source of pollution in areas such as the old central area of Cracow. Emissions of fly ash, sulphur dioxide, nitrogen dioxide and solid waste are linked to the production and use of coal with non-ferrous mining and quarrying techniques. Acid rain is also a problem associated with sulphur emissions. In fact, in contrast to other socialist countries, Poland is unable to commit itself to a 30 percent reduction in sulphur emissions by 1993.⁵

Environmental pressure groups in Poland focus on heavy industry, mining and power generation as the major source of air and water pollution. The Vistula and Oder river basins are heavily polluted due to the discharge of saline water from coal mines as well as the discharge of untreated or partially treated sewage. This has contributed to a serious problem of rural groundwater contamination.

The Vistula river runs from Upper Silesia through Cracow and Warsaw into the Baltic near Gdansk, constituting some of the most heavily industrialised area of Southern Poland. Though Cracow accounts for only 1 percent of Polish territory, it is responsible for over 4 percent of the nation's industrial production, more than 6 percent of particle emissions, 11.2 percent of gaseous

5. Convention on Long Range Transboundary Air Pollution, UNEP/GC/Information/11 Rev.1 (New York), November 1979, p.168.

pollutants, 8 percent of waste water and 6 percent of accumulated solid waste.⁶ Pollutants from the massive Sendzimir Steel Works located nearby and the use of coal-fired heating emissions are a major cause. Cracow lies downwind from the industrial heartland of Upper Silesia which adds to the air pollution.

Cracow has officially been designated as 'an area of "ecological disaster"', along with four other regions - Upper Silesia, Rybnik, Legnica-Glogow and Gdansk. the severity of the problem in these regions indicates the extent of the environmental crisis faced by Poland.

The Agenda for Action in Poland

Principles of environmental control do exist in Poland. To reflect social costs, enterprises are required to pay environmental fees upto the level of prescribed emission standards, while a much higher set of fines are imposed if they exceed these standards. Environmental laws have established quasi-property rights so that individuals, enterprises and other organisations can sue for compensation for losses due to excessive emissions. However, it is ineffective due to the low level of payments and lack of adequate monitoring capacity. A high level of environmental pricing should exist and it is important to bring under its

6. Stanley J.Kabala, "The Environment in Cracow: Great Concern and Modest Action", Report on Eastern Europe (New York), vol.2, no.10, 8 March 1991, p.10.

purview agents who are not covered under the existing system of fees and fines. The revenue raised could be used to establish an environmental investment fund to clean up severely polluted areas and reduce emissions.

If these fines are rigorously imposed in the heavily industrialised districts, it could lead to the closure of many enterprises. Hence, there is a need to think of a change in the energy policy.⁷ Strong autarchic trade policies which discourage the use of imported fuels, such as oil and gas, need to be reversed, along with the existent systematic underpricing of oil fuels, especially coal. There should be a change in relative fuel prices to encourage investment in 'smokeless' solid fuels. Also, it has to be examined whether any of the alternative fuels could be procured from any of the neighbouring countries at comparable costs.

With regard to air quality, a first objective should be to reduce emissions from burning of coal in small boilers without pollution control equipment. To deal with sulphur emissions, the solution involves the installation of flue gas desulphurisation equipment in all new coal-fired power plants.

To maintain water quality,⁸ river basin authorities should be set up to enforce emission standards and assess the impact of

7. G.Hughes, *ibid*, n.3, p.156.

8. M.Sobelmann, "New objectives in the area of environmental control in Poland", Environmental Policy Review, vol.3, no.1, January 1989.

cumulative discharges on the river systems as a whole. Attention needs to be given to the treatment of sewage and waste discharged into rivers by local authorities.

Czech and Slovak Republic (CSFR)

The acute environmental deterioration in the CSFR has been caused by problems of intensive industrialisation and concentrated agriculture. Since the early 1980s, concern has been expressed about the wide-spread air pollution caused by the burning systems and power stations in urban areas and, as a result, drinking water in industrial regions has been endangered by toxic wastes. The surface mining of lignite fuel has denuded zones and one-third of the country's forests have been destroyed.

As in the case of Poland, the main source of the air pollution problem is energy use. CSFR relies on brown coal for more than 40 percent of total energy supplies and on black coal for a further 20 percent.⁹ The lower caloric value of brown coal means that greater quantities need to be burnt to generate the required energy output. The industry's inefficient use of energy adds to the problem.

CSFR has the fifth highest rate of sulphur dioxide emission in Europe (roughly 2,800,000 tons a year) though this is

9. Commission of the European Communities, Directorate-General for Economic and Financial Affairs, European Economy: Economic situation and economic reform in Eastern Europe (Brussels), no.8/9, August/September 1991, pp.19-24.

less than Poland (4,200,000 tons). In areas of Northern Bohemia, concentrations of sulphur dioxide average between 110-130 micrograms per cubic metre and reach 1000 micrograms per cubic metre at peak times.¹⁰ (The WHO standard for sulphur dioxide in the air is 40-60 micrograms per cubic metre).

With respect to water pollution, according to official statistics, half of the country's drinking water does not meet the government's standard of purity.¹¹ The average application of 260 kilograms of fertiliser per cultivable hectare has resulted in nitrate levels in ground water that are unacceptable. Only 40 percent of waste water and sewage is satisfactorily treated before being discharged into rivers. Hence, only 17 percent of the country's river water is suitable for municipal water supplies, only 34 percent is fit for industrial use, and 22 percent requires substantial treatment prior to use.¹²

10. *ibid*, p.23.

11. Czech and Slovak Republic State Commission for Science, Technology and Investment, The Environment in Czechoslovakia (Prag: State Commission, 1990), p.29.

12. *ibid*, p.30.

Hazardous toxic waste is a cause of concern. According to a World Bank Report published in 1990, hazardous and toxic wastes were not recognised in the former regime's environmental policy.¹³ Hence, information on the types, quantities and disposal of toxic wastes is lacking. Reports have emerged of contamination of soil and groundwater in the vicinity of the former Soviet bases due to incorrect handling of the large quantities of fuels, solvents, lubricants and other hazardous materials. Two sites particularly affected are Vysoke Myto in Bohemia, and Frenstat pod Radhostem in Moravia.¹⁴

The environmental issue on which the CSFR takes a different stand from the other East European countries is nuclear energy. Nuclear power supplies 20 percent of the country's electricity and the government is determined to continue developing this sector despite fears voiced by neighbouring countries like Austria about the safety of CSFR's Soviet-designed nuclear facilities. CSFR currently has 30 reactors in operation around the country.¹⁵

13. The Environment of the Czech and Slovak Federated Republics, 1990 (Report prepared for the World Bank 1990).

14. Remarks made by former Czech Minister for Environment, Bedrich Moldan, to US Environmental Protection Agency, Washington D.C., in October 1990, quoted in Stanley J. Kabala, *ibid.*, n.l, p.15.

15. "International Environment Reporter", 16 January 1991.

The Agenda for Action in the Czech and Slovak Republics

A priority on the agenda is to substitute fossil fuels with oil or gas as mining leads to tons of mining waste and the devastation of large areas in which open-pit mining operations occur. If nuclear power is to increase as a source of energy, safety considerations play an important part. The government's concern can be seen in the decision to engage the German firm, Siemens A.G., to design and instal modern electronic control equipment at the Termelin nuclear facility in the CSFR.¹⁶

In order to ensure the availability of drinking water, it is important to ensure that waste water and sewage are satisfactorily treated before being discharged into rivers. Nitrate contamination of drinking water as a result of fertiliser run-off is particularly acute in Prague, Plzen and Usti nad Labem. The average application of 260 kilograms of fertiliser per cultivable hectare has to be reduced.

Until 1990, official responsibility for environmental protection was with the State Commission for Science, Technology and Investment, and was given no importance in the Commission's activities. In 1990, both the Czech and Slovak Republics established Ministries for the Environment, and also a Federal Commission with the status of a ministry. The Federal Commission has responsibility for coordination of policy, international

16. "Nuclear Pact Awarded", Eastern Europe Report, 29 October 1990.

cooperation, nuclear safety, and issues of concern to both the Republics.

The two Republics have allocated 7.5 billion koruny (\$96,000,000) and 5.6 billion koruny (\$72,000,000) respectively while the Federal budget is 3000,000,000 koruny (\$4,500,000). However, these figures are totally inadequate in dealing with the environmental situation as an estimate of 200 billion koruny (\$26 billion) will be nearer the figure required over the next two decades.¹⁷

Compared to the other East European countries, CSFR has been quicker in joining regional joint initiatives - for instance, with the Pentagonal group (with Italy, Yugoslavia, Hungary and Austria). CSFR also appears in a position to buy Western technologies for abatement of water and air pollution, such as the technology for flue-gas desulphurisation equipment. Hence, some environmental improvement, especially with air pollution, is considered likely.

Hungary

Similar to the other Central East European countries, the urban centres and industries in Hungary developed with no equipment for controlling pollution - whether in factories, steel mills or automobiles. Under the old regime, industrial development invariably led to environmental degradation. One of the major

17. Stanley J.Kabala, "The Reform of Environmental Policy", Report on Eastern Europe, 22 February 1991, p.13.

environmental problems faced by Hungary is that of waste disposal. At Dorog, a small mining town with 13,000 inhabitants, physicians noticed a high incidence of chronic illnesses among children due to the acute concentration of pollutants from local coke and pharmaceutical plants. In the Nagytetyeni area, south of Budapest, acute lead contamination of the soil caused by Metalochemia, a battery-making factory, was discovered as early as 1972.¹⁸

Apart from pollution by factories, the sites around former Soviet bases are still heavily contaminated with fuel, lubricants, solvents and other toxic wastes that has simply been allowed to seep into the soil. Added to this has been the problem of 'export' of hazardous waste from neighbouring European states for waste disposal. Szentgotthard, a small town on the Austro-Hungarian border, accepted polluted soil which was removed while the underground railway system was being built in Vienna.¹⁹ Waste oil from Germany was burned at the Beremend Cement Works.

Such waste materials not only pollute the soil but due to seepage through rain and subsoil water movement, also find their way into subterranean water resources. Hence, the groundwater in Hungary is heavily polluted. In 1987, the Public Health and Epidemic Control Station took 102,000 drinking water samples, and

18. Stanley J. Kabala, *ibid*, no.1, p.15.

19. Pal Farkas, "Why the environment comes last", The Hungarian Observer, May 1989, p.17.

found 32.9 percent failed to meet the specifications. Between 1980-84, 43 epidemics covering 5267 incidences of disease were caused by drinking water.²⁰

However, Hungary's deposits of karst waters are still of a very high quality. The proposed Gabčíkovo-Nagymaros barrage scheme on the river Danube (scheduled to be completed by 1994) would have polluted the balance of this system. In fact, the opposition to this project spearheaded by the 'Danube Circle', which won the 'Right Livelihood Award', was responsible for uniting environmental movements as a strong force within Hungary.

Air pollution is not of the same magnitude as the other East European countries.²¹ Nevertheless, the annual discharge of pollutants into the air is 1.3 million tons of sulphur dioxide, 300,000 tons of nitrogen oxide, 800,000 tons of grit and dust, and 1.4 million tons of carbon dioxide.²² There is an immediate need to curb this rising trend since air pollution causes the maximum structural damage to buildings as well as widespread health problems.

20. *ibid*, p.15.

21. Y.Golan, "Hungary Makes Some Progress", Environmental Policy Review, vol.3, no.1, January 1989.

22. Pal Farkas, *ibid*, no.18, p.17.

Agenda for Action in Hungary

Hungary's Ministry of Environment and Water Management was set up in 1987, In 1989, the Ministry published a report in a daily newspaper on "The Environmental State of Hungary", inviting public debate. It is indicative of increased public participation in framing environmental policy in Hungary as well as the influence of the twenty or more environmental protection groups.

A major change needs to take place in the uneconomic and energy-intensive nature of Hungarian industry. The introduction of a tax incentive for a company to 'clean up' the environment could have a beneficial effect. At present, there is a system of fines but these are absorbed as additional costs by most industries.

In contrast to the other Central East European countries, more than 64 percent of the energy requirements of Hungary are imported.²³ Of the total energy input, the share used by the production sector is 60 percent and by municipalities and the population is 40 percent. Coal requirements can be internally met till the end of the century. However, the amount of recoverable crude oil and natural gas in the country is diminishing, hence the share of imports will increase to over 70 percent for the next decade.

This would mean an increasing burden on the Hungarian economy. Only when economic problems are tackled, is there hope

23. Gyorgy Weber, "Energy situation and longer term perspectives of energy supply in Hungary", Newsletter, International Business Research (Vienna), 21 December 1990.

of generating the funds for environmental-friendly industrial and agricultural methods.

The last five-year plan (which ended in 1990) earmarked 6 billion forints (US \$111 million) of central finance and income from fines to protect the atmosphere, 7 billion forints (US \$130 m.) for building storage facilities for hazardous waste and slightly more for water pollution control.²⁴ Clearly, a much greater degree of investment is needed to bring Hungary any closer to the goal of achieving full environmental protection.

The extent of the environmental problems in Central-Eastern Europe is thus severe, and more so in the so-called "triangle of pollution" encompassing the former GDR, CSFR and Poland. Thirty percent of all European sulphur dioxide emissions as well as 20 percent of all European nitrogen oxide emissions are stated to originate from this region.²⁵

Air-pollution related forest damage in Eastern Europe is among the worst in the world, especially the woodlands in the brown coal belt of southern Poland and northern Czech republic. A survey by the United Nations Economic Commission for Europe in 1989 found signs of damage in 82 percent of Poland's forests, 73 percent of CSFR and 36 percent of Hungary's.

24. Pal Farkas, *ibid*, no.18, p.18.

25. United Nations Commission for Europe and North America, Environmental Statistics in Europe and North America: An Experimental Compendium, 1987, pp.1-29.

A major cause is that the economies of Eastern Europe had to follow the Stalinist model of heavy industrialisation. The enforcement of production quotas and targets left no room for environmental protection. Further, the wasteful nature of the industry - consuming around twice as much energy and water per unit of GNP than Western countries - contributed to the problem. It needs to be clarified that the former Communist regimes were not oblivious to the environmental implications. A system of fees and fines for maintaining emission standards did exist but these were not enforced in the preoccupation with meeting production targets. Hence, the environmental problems in these countries of Central-Eastern Europe have reached alarming proportions.

Perspectives of the European Community

The current revolution which has opened up the countries of Central-Eastern Europe since 1989 has led to the new governments recognising the need to integrate environmental management and investment with economic reforms in progress. National environmental strategies are being formulated, but there is considerable need for international assistance and support.

Recognising this need, the European Community has taken the responsibility of being involved in the region. Undoubtedly, the main reason is the geography of Europe which makes the issue of transboundary pollution a real threat. Recent examples include the blaze at a chemical plant near Basel (Switzerland) in November 1986 which released deadly/chemical compounds into the river Rhine. The success of a European environmental policy

depends on environmental safeguards being implemented uniformly. The need to reduce pollution levels in the East is an issue that has brought the Community and the governments of Central-Eastern Europe together since there is no controversy over the goals to be achieved.

The economic situation of the countries of Central-Eastern Europe is such that growing East-West economic cooperation is essential if Europe has to reduce its reputation as one of the biggest polluters. Environmental protection is a growth industry and the transfer of environmental technology would not compromise Western technological security interests, as had occurred earlier with the Moscow-Bonn gas pipe-line deal.

Another factor is that as these states try to find their place in a new Europe, the underlying model for their new relations is clearly the European Community. The efforts to formulate environmental regulations has been significantly influenced by EC standards. For instance, in CSFR, legislation on air quality presented before the Federal Assembly in late 1990 is based on EC environmental standards and procedures. Even the new statute on waste management has incorporated elements from the 1989 Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, to which the EC also subscribes.²⁶

26. "International Environmental Reporter", 16 January 1991.

The countries of Central-Eastern Europe are in line for receiving Associate Membership of the Community which would demand harmonisation of all their policies, including that of the environment, with EC standards. Relations between the European Community and the Council for Mutual Economic Assistance (COMECON) were officially established with a Joint Declaration on 25 June 1988. Since then, the EC has signed Trade, Commercial and Economic Cooperation Agreements with Hungary on 26 September 1988, with CSFR on 19 December 1988 and with Poland on 19 September 1989.

Within its frontiers, the Community has been able to establish and put into practice a substantial environmental policy with over 120 legislative acts.²⁷ To achieve some degree of parity, the Community does have a stake in ensuring standards of environmental protection in Central-Eastern Europe. The question that needs to be asked is how much of this has actually been put into financial terms as investment in the region and whether the Community can sustain the degree of long-term assistance that is a necessity for any change in the situation.

European Community's Policy of Economic Assistance towards Central-Eastern Europe

The launching of the multilateral aid programme towards political and economic reforms in Hungary and Poland was declared

27. Commission of the European Communities, State of the Environmental Report, 1986 (Brussels, 1986), p.25.

at the Western Economic Summit (Summit of the Arche) in Paris from 14-16 July 1989. Besides the European Commission, the states which attended the Summit were the United States, Canada, Japan, France, Germany, Italy and the United Kingdom. It was at this Summit that the Commission of the European Communities was entrusted with the task of associating all interested parties in the support programme.

The first coordination meeting was held in Brussels on 1 August 1989. The participants comprised the states which first attended the Paris Summit, the other member states of the European Community, the members of EFTA - Austria, Switzerland, Finland, Iceland, Norway, Sweden; and the states of Turkey, New Zealand and Australia - together making up the Group of 24. At the Strasbourg Summit from 8-9 December 1989, formal decisions were adopted by the Community to assist economic reform in Hungary and Poland. The PHARE programme initially began as the "Poland and Hungary: assistance for economic restructuring" and gradually extended to cover the other countries of the region. This occurred during a ministerial level meeting in July 1990 and is now defined as "Coordinated support for the restructuring of the economies of certain Central and East European countries." The PHARE Task Force was thus established with the support of the Group of 24, the European Investment Bank, the International Monetary Fund and the World Bank.²⁸

28. Commission of the European Communities, D-G External Relations Operation PHARE - Poland and Hungary: Assistance for Economic Restructuring, (Brussels), December 1989.

There are two basic conditions attached to this policy of Western assistance. The first is the installation of democratic mechanisms and basic liberties. The second is the adoption of macro-economic policies for avoiding inflationary excesses during this period of structural change.

Operation PHARE consists of numerous programmes, of which 2.4 percent of the total bilateral assistance of the G-24 has been specifically committed to the environment.²⁹ Individual European countries have also allocated considerable resources for environmental programmes. The European Community spent more than 20 percent of the 1990 PHARE budget in the field of environment. The G-24 framework has also drawn up criteria to help beneficiary countries define their strategies and projects. The criteria include - collection of reliable data on the environmental situation, assessment of benefits of measures (on health), transboundary impact, relationship with other sectoral policies (such as energy, training) together with progress towards a market economy.

It is important to note that while the European Community has taken responsibility for Central-Eastern Europe as a

29. Commission of the European Communities, D-G External Relations, Progress Report on G-24 assistance to Central and Eastern Europe, Brussels, 30 January 1991.

30. Commission of the European Communities, D-G External Relations, Report on the progress of coordinated aid from the 24 to Central and Eastern Europe (Brussels), 3 July 1990.

supranational body, the terms of assistance are split up between the member-states of the EC and other countries of the G-24 group. The structure of the assistance programme is such that responsibility for the projects is assumed entirely by the European Community while it is open for co-financing by the G-24 countries.

Among the EC countries, Belgium has set aside a budget of ECU 1.5 million for environmental projects in Poland and Hungary. The project in Poland is for monitoring air pollution and water quality in the Mazurian lakes (through establishing a laboratory) and for researching tree diseases. In Hungary, the project is for air monitoring stations and training programmes which will be financed by Belgium. Italy has granted Poland a low interest loan of US \$30 million for environment management. The Danish Parliament has decided to establish an environmental conservation scheme for East-Central Europe with a budget of ECU 63.7 million spread over five years from 1991. As part of this, the aim is to finance technical assistance programmes.³¹

The responsibility of the Community lies in monitoring implementation of the projects. The latter primarily relate to air pollution, water management, waste management and protection of natural resources. However, the Community has left selection of the projects to support upto the individual member-states. This could be construed as a more flexible approach in disbursing

31. Commission of the European Communities, Secretariat-General, Sec (91) 570, Update on current initiatives in Eastern and Central Europe, Brussels, 21 March 1991.

economic assistance. It is perhaps also responsible for the lack of a coherent Community document on long-term strategy in the region. The Community needs to look into this area more closely.

The main sectors of focus in the PHARE programme of economic assistance, apart from environmental protection, are - improved access to the markets of the G-24, restructuring of agricultural and foodstuff sectors, training, and promotion of investment and industrial modernisation.³² The Community also has other programmes for training and management skills - such as TEMPUS. But if environmental protection is to be realised as a goal, a policy needs to emerge on how to strengthen institutions and develop environmental expertise. New industrial enterprises established in the region need to have inbuilt safeguards for pollution control. Greater assistance also needs to be channelised towards raising energy efficiency which could help prevent environmental degradation. A survey of the budgetary allocation would give an idea of the nature of investments and credits accruing to the environmental sector.

Financial Investment in the Region

Jacques Delors, in his address to the European Parliament on 17 January 1990 observed that if the European Community were to give the six East European Nations the same assistance it provides to the depressed regions of Greece, Spain, Portugal,

32. Commission of the European Communities, D-G Information, External Information, EC-Eastern Europe Relations (Brussels), x/B/4 Update 12 March 1991.

Ireland and Southern Italy, such a level of assistance would amount to \$23 billion a year.³³ Even if the EC did invest this entire amount, it would still not be adequate to meet the level of need.

There are no clear figures on the costs of cleaning the environment in Central-Eastern Europe. This is because reconstruction of the economy cannot be delinked from environmental measures. However, among the approximations that have emerged, the Polish government estimates costs of \$70 billion over a period of 30 years. In the CSFR, the estimates are over \$30 billion.³⁴

It is also important to note that unless there is a degree of stabilisation in the economy, the governments would not be able to balance the funds needed for environmental protection. A World Bank assessment published in April 1991³⁵ suggests that Poland, CSFR and Hungary will not be able to regain their 1989 income levels until 1996. Hence a period of continued financial support is essential for these economies to ease the period of transition to privatisation and to reduce the social costs of adjustment.

33. Address by Jacques Delors to the European Parliament, "Presenting the Community Programme for 1990", EC Press Release (Strasbourg, 17 January 1990).

34. Helmut Schreiber, "The Threat from Environmental Destruction in Eastern Europe, "Journal of International Affairs (New York), vol.44, no.2, Winter 1991, p.367.

35. "The transformation of economies in Eastern and Central Europe: issues, progress and prospects" (Washington D.C., World Bank, April 1991).

The PHARE programme of economic assistance commenced in January 1990 in Poland and Hungary with a budget of 300 million ECU. The scope of the PHARE operation was extended to CSFR, Romania, Bulgaria, Yugoslavia and the GDR through Council resolution 2698/90 of September 17, 1990.³⁶ Additional credits of 200 million ECU were committed by the end of 1990. The objectives of the assistance programme are to help in economic restructuring through the provision of expertise, know-how, technical support and advice.

In early 1991, the Community and Group of 24 annual commitments aiming primarily at economic restructuring amounted to approximately US \$38 billion. Almost three-quarters of the amount was provided by the European Community and its member-states.³⁷ The break-up of the figure is as follows:

- US \$8 billion in the form of grants;
- US \$2 billion in the form of structural loans from institutions such as the European Investment Bank and European Coal and Steel Community (excluding Yugoslavia);
- US \$11.5 bn for the capital of the European Bank of Reconstruction and Development;
- US \$5 bn in the form of bilateral loans and credits (excluding the Stabilisation Fund for Poland); and
- US \$11.5 bn in the form of export credits and investment guarantees.

36. P.Mael, Letter to all Delegations, "General Briefing on implementation of PHARE projects", 057/3-7 (Brussels), 29 April 1991.

37. "Community/G-24 Medium-term Macro Economic Assistance to the Countries of Central and Eastern Europe", Press Release no.IP(91)504, (Brussels, European Community, 6 June 1991).

Hence, it is only through this concept of 'burden-sharing' that the Community can provide economic assistance to this region. Among the member-states of the EC, Germany provides lion's share with a contribution of 26.68 percent (See Table I overleaf). However, in the area of the environment, such 'Burden-sharing' has only amounted to funds of ECU 22 million in the case of Poland and ECU 25 million in the case of Hungary during 1990.³⁸

It is clear that among the EC countries, Germany will continue to play a major role in environmental protection, followed by smaller countries such as the Netherlands, Austria and the Nordic states. Germany has not only signed economic agreements with the Central-Eastern European countries, but some German states have initiated forms of cooperation. For instance, Bavaria has initiated numerous projects, including lending desulphurisation equipment to a power plant in CSFR and assisting in modernising other power plants there.

Despite its present limitations, there is a possibility that financial investment in the region will increase over the next decade. In sustaining this level of long-term assistance, the Community would need to study more closely the orientation of its projects and policy of assistance.

38. Commission of the European Communities, Report on the Progress of Coordinated aid from the 24 to Central and Eastern Europe (Brussels), 3 July 1990.

TABLE I

Distribution of Assistance to Central and Eastern European Countries

Among Members of G-24*
(percentages)

<u>European Community</u> (incl. EIB+ECSC)	25.2	
<u>EC Member States</u>	47.8	
of which Germany		26.68
Italy		5.5
France		6.0
United Kingdom		3.3
Spain		2.3
<u>EFTA</u>	7.7	
of which Austria		2.7
Switzerland		2.0
<u>Turkey</u>	1.3	
<u>North America</u>	9.5	
of which United States		8.0
Canada		1.5
<u>Far East/Oceanic</u>	8.5	
of which Japan		7.5
	100	

* Overall assistance including grants, export credits, balance of payments loans and EBRD subscriptions. Cumulative commitments since mid-1989

Source : Commission Services on the basis of information available on May 31, 1991.

in European Communities, Spokesman's Service, Press Release: "Community/G-24 Medium-term Macro Economic Assistance to the Countries of Central and Eastern Europe" (Brussels), 6 June 1991.

The Policy Response

The populace of Central-Eastern Europe has expressed environmental protection as an issue of major concern. In CSFR, for example, this concern is shared by 83 percent of the population which has, in effect, given the government a mandate to fulfil these aspirations.³⁹ The European and international support to these ideals has resulted in definite policy formulations for protecting the environment in the region.

The question that arises is how quickly can the Central-Eastern European economies be revitalised in order to generate the resources with which to protect the environment. The European Community has successfully demonstrated that good environmental management is good economics and, as part of the move towards a Single Market, clarified that the cost of non-implementation of environmental reform is twice that of implementation.⁴⁰ The desire for these measures to be successfully implemented in Central-Eastern Europe depends on the success of the short-term measures to eradicate environmental pollution. Further, as the countries are caught in a cycle of inflation and credit squeeze with a drop in subsidies, solutions will have to emerge so that the environment does not become the victim.

39. Remarks made by former Czech Minister for the environment, Bedrich Moldan, to the House Congressional Seminar on Political and Economic Aspects of Environmental issues in Eastern Europe, in Washington D.C., in October 1990. Quoted in Stanley J.Kabala, *ibid*, n.1, p.15.

40. *ibid*, no.26, pp.26-28.

Under the Single European Act, the Community has taken responsibility for harmonisation of its internal policy as a step towards integration. Through the framework of the European Political Cooperation, it is working towards laying the structure for a unified Europe. If Poland, Hungary and CSFR are to assert their place in a "Europe without frontiers", the Community has to initiate this process now, through helping reverse the process of environmental degradation. A larger investment in the environmental sector is an immediate need and the Community should be prepared to bear some of the extra costs.

The Central-Eastern European countries are in the process of adopting market structures but the final form that these economies would take is not clear. The link between privatisation and environmental protection is vital and forms part of the Community's objectives in the region. This will be examined in the next chapter as part of a discussion of the Community's long-term perspectives and its implications for cooperation with the developing world.

CHAPTER FOUR

ENVIRONMENTAL PROTECTION IN THE EUROPEAN COMMUNITY'S APPROACH TO ECONOMIC RESTRUCTURING IN CENTRAL-EASTERN EUROPE

Integration of the environmental dimension in the European Community's programme of economic assistance to Central-Eastern Europe is of critical importance. It formed part of the priority areas for action identified right from the first Coordination Meeting at Brussels between the Community and members of the Group of 24 in August 1989, and still bears significance.

The patterns of allocation of aid would need to be suitably adjusted to continue for a number of years before the newly-emerging market economies reach a position to function effectively. The quantity of aid needed and amount of diversification of aid patterns to make it effectively revitalise the Central-East European economy are still issues of some controversy.

Further, the countries are caught in a cycle of inflation and credit squeeze. As subsidies are reduced, it has to be seen how far environmental protection measures continue to be integrated into sectors of industrial and energy policy.

I

Aid-giving mechanisms under Operation PHARE

Aid under the PHARE programme is not 'tied' to any specific clauses. However, the macro-economic assistance is only provided to countries which are negotiating with or have completed negotiations for economic reforms with the I.M.F.³ Assistance under this scheme includes the US \$ one billion Stabilisation Fund for Poland, US \$ one billion medium-term loan to support the IMF standby programme in the CSFR and the \$500 million medium-term loan to Hungary to support the IMF Extended Fund Arrangement. This form of macro-economic assistance accounts for 28.6 percent of all G-24 aid.

Food aid delivered to Poland in 1989 and 1990 was either distributed as humanitarian aid or sold on the Polish market to generate Counterpart Funds.⁴ On 31 December 1990, the Community Counterpart Fund stood at 70 million ECU from which over 4000 small projects were financed. Counterpart funds from other donors have also been used for financing projects, for instance, funds from Finland have been used for energy savings and the environment.

3. Commission of the European Communities, D-G External Relations, "Progress Report on G-24 Assistance to Central and Eastern Europe" (Brussels), 30 January 1991, p.1.

4. *ibid*, p.4.

With regard to aid in specific area sectors, a number of guidelines were drawn up in the G-24 framework in early 1990. In order to enable recipient countries to define their strategies, a set of criteria were delineated for selection of projects for environmental assistance.⁵ These included the collection of reliable data on the environmental situation, assessment of short-term and long-term benefits of the measures especially on health, the transboundary impact, relationship with other sectoral policies such as energy and training, and its impact on the progress towards a market economy. The decision on policy orientation would be taken collectively by the Commission with the World Bank, European Investment Bank and other international organisations.

It also needs to be stressed that the support for economic restructuring encompasses various levels of priority. First, are the 'core' activities aimed at the economic reform process - restructuring of public enterprises, privatisation, modernisation of financial services, development of small and medium-sized enterprises, growth of the social sector and other areas to build a market economy. Secondly, technical assistance and vocational training programmes are emphasised since such skills are indispensable in establishing a market economy. Thirdly, support exists for policy changes that are agreed between the

5. *ibid*, p.7.

governments of Central-East European countries and multilateral financial institutions such as the IMF and World Bank.

Combatting environmental pollution does not form part of the core sector of the assistance programme. Till now only 2.4 percent of the total bilateral assistance of the G-24 has been specifically committed to the environment. However, the Community has allocated 20 percent of the 1990 PHARE budget in the environmental sector (See Table II). A major factor for this is undoubtedly the transboundary nature of pollution which affects the European continent and the magnitude of the problem to be tackled. A number of individual European countries such as Germany, Italy, Denmark, Sweden, Finland, Switzerland and Austria have allocated considerable resources for environmental programmes. These are in the form of grants and credits.

There has been considerable speculation whether the newly-formed European Bank for Reconstruction and Development (EBRD) would place environmental clauses in its package of financial aid.⁶ The idea of creating the EBRD was first put forward before the European Parliament by President Mitterrand on 25 October 1989. It was formally endorsed at the Strasbourg Summit of the European Council on 8-9 December 1989. The agreement to constitute the Bank was signed in Paris on 15 January 1990 by representatives of forty governments (39 since German Unification), including the member-states of the European Community and the European Investment Bank. (See Table III for a list of percentage of shareholdings).

6. Commission of the European Communities, D-G Information, "The European Bank for Reconstruction and Development, x-icc/A/4 (Brussels), 11 December 1990.

Sectoral Distribution of Assistance to Central and Eastern Europe
(percentages)

	Bilateral Assistance by Members of G-24 and the EC	Assistance by Multilateral Organisations
	-----	-----
- Social and Admin. Infrastructure	0.6	-
- Economic Infrastructure	7.1	20.9
of which environment	2.4	0.3
training	1.9	-
- Productive Sectors	7.4	9.6
of which agriculture	1.4	3.1
- Non-project Assistance *	28.8	14.0
- Emergency Assistance	4.8	-
of which food aid	4.3	-
- Official Support	34.8	-
of which export credits	29.3	-
investment support	5.5	-
- Unallocated	16.5	55.8
	-----	-----
	100	100

* Including - Stabilization Fund Poland
 Medium-term Loan Hungary
 Financial Assistance Czechoslovakia

Source: Commission of the European Communities, D-G for External Relations, Report on the Progress of Coordinated Aid from the 24 to Central and Eastern Europe (Brussels), 3 July 1990.

Participating countries and institutions
and percentage shareholding⁽¹⁾

A. EUROPEAN COMMUNITY

TABLE III

x

Germany	8.52
France	8.52
Italy	8.52
United Kingdom	8.52
Spain	3.40
Netherlands	2.48
Belgium	2.28
Danmark	2.20
Greece	0.65
Portugal	0.42
Ireland	0.30
Luxembourg	0.20
EC (as such)	3.00
EIB	3.00
	51.00

B. OTHER WEST EUROPEAN COUNTRIES

Austria	2.28
Sweden	2.28
Switzerland	2.28
Finland	1.25
Norway	1.25
Turkey	1.15
Cyprus	0.10
Liechtenstein	0.02
Malta	0.01
	10.72

(1) All figures rounded to 2 decimal points.

C. CENTRAL AND EASTERN COUNTRIES

USSR	6.00
Poland	1.28
Czechoslovakia	1.28
Yugoslavia	1.28
Bulgaria	0.79
Hungary	0.79
Roumania	0.48
	11.90

D. NON EUROPEAN COUNTRIES

United States	10.00
Japan	8.52
Canada	3.4
Australia	1.0
Israel	0.65
Korea (South)	0.65
Mexico	0.30
Egypt	0.10
Morocco	0.10
New Zealand	0.10
	24.82
TOTAL	<u>98.44</u>

(ex-German Democratic Republic) 1.56

100.00

* The Federal Republic of Germany has not taken up the shares of the ex-GDR. The question of their reallocation therefore remains open.

Source: Commission of the European Communities, D-G for Information, The European Bank for Reconstruction and Development (Brussels), 11 December 1990.

Operating in London since April 1991 with a capital of 10 billion ECUs, the purpose of the Bank is clearly stated in Article 1 - "to foster the transition to open market-oriented economies, and to promote private and entrepreneurial initiative in Central and Eastern European countries committed to and applying the principles of multiparty democracy, pluralism and market economies." The Bank would extend loans and equity investments to private companies, state-owned companies and for infrastructure investments.

It is too early to form an assessment of the difference in aid patterns between the EBRD and institutions such as the World Bank, which has a specific budget for the environment. However, an international campaign by non-governmental organisations (NGO) has succeeded in placing an environmental mandate in the charter of the EBRD.⁷ They have also been campaigning for an environmental office, adequate staffing, a clear commitment to the environment in the new bank's lending programme and public participation in project review. Such an environmental mandate has not been forthcoming but there is the possibility of a policy review by the Bank when it chooses to exercise its power to administer Special Funds.

7. David Reed, "The European Bank for Reconstruction and Development: An environmental opportunity" (draft), Worldwide Fund for Nature International (Washington D.C.), September 1990. Cited in Hilary F.French, "Green Revolutions: Environmental Reconstruction in Eastern Europe and the Soviet Union, The Columbia Journal of World Business (New York), Spring 1991, p.44.

Multilateral agencies have chosen other means of alleviating the environmental crisis. Two debt-for-environmental-protection swaps have been negotiated with Poland.⁸ \$60 million to be contributed by the German government will finance half of Germany's environmental aid programme for Poland. The swap by the World Wildlife Fund (based in Washington D.C.) will generate \$50,000 for a project to help clean Poland's Vistula River.

It remains to be seen if the Community and institutions such as the European Bank are able to use alternate means, such as the example cited above, to reduce the debt burdens of the region. The Community is the largest contributor of financial assistance to the region, followed by Japan (see Table IV). The geographical distribution is also given as percentages (See Table V). Poland enjoys the largest amount of bilateral assistance by members of the European Community and the G-24, followed by Hungary and CSFR. It is also interesting to note that the combined burden-sharing by members of the EC and G-24 almost equals the assistance by multilateral institutions.

8. Hilary F.French, *ibid*, p.45.

G-24 BURDENSHARING FOR FINANCIAL ASSISTANCE TO CEEC
situation as of 28 May 1991
\$ million

	Czechoslovakia (US\$ 1000 million)		Hungary (US\$ 500 million)		Bulgaria (US\$ 800 million)		Romania (US\$ 1000 million)	
	Contribution	% share of total effort	Contribution	% share of total effort	Contribution	% share of total effort	Contribution	% share of total effort
Community	500	50	250	50.0	400	50.0	500	50.0
Japan	200 ¹⁾	20	(150) ³⁾	30.0	pos. indic.		no indication	
Austria	50	5	20	4.0	20	2.5	25	2.5
Finland	15	1.5	10	2.0	(10) ²⁾	1.3	pos. indic.	
Norway	16	1.6	15	3.0	13	1.6	15	1.5
Sweden	25	2.5	20	4.0	20	2.5	25	2.5
Switzerland	40	4.0	30	6.0	32	4.0	40	4.0
Turkey	1	0.1	1	0.2	unlikely		unlikely	
Canada	25	2.5	12.5	2.5	(20) ²⁾	2.5	(25) ²⁾	2.5
United States	15	1.5	10	2.0	25	3.1	unlikely	
Iceland	-	-	pos. indic.		pos. indic.		pos. indic.	
Saudi Arabia	60 ²⁾	6.0						
Kuwait	50	5.0						
TOTAL	997	99.7	368.5(+150?)	71.7(+30.0)	510(+30?)	63.8 (+3.8?)	605 (+25?)	60.5 (+2.5?)
Memorandum ⁴⁾):								
IMF (net)	1,400		1,400		500		815	
World Bank (SAL)	225		500		300		300	

TABLE IV

- 1) Cofinancing of World Bank SAL.
2) Will have to be confirmed.
3) Cofinancing of World Bank SAL II; to be confirmed.
4) Expected disbursements; in 1991.

Source: European Communities, Spokesman's Service, Press Release: "Community/G-24 Medium-term Macro Economic Assistance to the Countries of Central and Eastern Europe" (Brussels), 6 June 1991.

T A B L E V

Geographical Distribution of Assistance to Central
and Eastern European Countries
(percentages)

	Bilateral Assistance by Members of G-24 and the EC -----	Assistance by Multilateral Organisations -----
Poland	40.1	37.9
Hungary	26.8	22.7
Czechoslovakia	5.1	7.2
Romania	2.1	2.3
Yugoslavia	1.4	25.6
Bulgaria	1.1	4.3
Unallocated	23.5	-
	----- 100	----- 100

Source: Commission of the European Communities, D-G for External Relations, Report on the Progress of Coordinated Aid from the 24 to Central and Eastern Europe. (Brussels), 3 July 1990.

II

Pace of Economic reform in the Countries of Central-Eastern Europe

In Poland and Hungary, the PHARE (Poland, Hungary Aid for Economic reconstruction) operational service commenced in January 1990 but these countries of Central-Eastern Europe had no previous experience in handling development assistance. Decisions regarding the priorities to choose for PHARE financing took time in Poland. Even in Hungary, following the elections of 8 April 1990, the new government took until September to form a coordinating unit for PHARE activities. The governments delayed in being able to submit fully costed proposals for technical assistance projects. The newly constituted Parliaments needed time to pass the necessary legislation to implement these programmes. Hence, development assistance given under the PHARE programme could not be put into effect immediately.⁹

The process of economic restructuring requires sectoral reforms in the area of environmental clean-up, industrial restructuring, privatisation and development of small and medium-scale enterprises. The authorisation by the Commission encompasses the following aims:¹⁰

- (a) ensuring rapid and effective use of the aid, allowing fast completion of the main tasks involved in the preparation and execution of the PHARE programme in general and individual projects in particular;

9. P.Mael, "General briefing on implementation of PHARE projects", Letter to All Delegations, 057/3-7, Brussels, 29 April 1991.

10. Commission of the European Communities, Directorate-General for Information, EC-Eastern Europe Relations (Brussels), x-icc/A/4, Update 7 December 1990.

- (b) reacting with speed and flexibility to the recipient countries' urgent need for limited vocational training and trade and investment promotion operations and functioning as an integral part of their efforts to expand their knowledge and practical know-how and improve their trade and economic relations with the Community;
- (c) improving the Commission's ability to give proper and rapid consideration to the urgent problems arising in the recipient countries and allowing it to take specific measures to organise its aid efficiently.

This indicates that the assistance under the PHARE programme aims at being comprehensive. The importance given to the environmental sector reflects the perceived responsibility in the Community for the protection of the environment beyond its boundaries.

Under Tadeusz Mazowiecki in 1990, Poland rushed to the market economy with a 90 percent devaluation of the zloty, freeing of almost all prices, a radically slashed state budget and proposed privatisation of half the state by 1993. Parliamentary elections at the end of 1991 cut short these plans. A confused grouping of a centrist-rightist four-party coalition led by 61 year old Jan Olszewski swept Parliament. However, the declining trend in the Polish economy has not shown any sign of an upswing. Poland's GDP declined by 12 percent in 1990, industrial production in the state sector fell by 23 percent and during the first five months of 1991, industrial output fell by a further 8.6 percent compared to December 1990. Unemployment was negligible at the start of 1990 and rose to 1.5 million in June 1991 (comprising 8.5 percent of the work force)¹¹.

11. Commission of the European Communities, D-G for economic and financial affairs, "Economic situation and economic reform in Central and Eastern Europe", (Brussels), July 1991.

A reason for these trends is undoubtedly the radical stabilisation measures introduced in the economy on 1 January 1990. The privatisation programme aims at privatising half of Poland's 8,000 state-run enterprises in the next three years, but is made difficult by the absence of a sound banking system.

The situation does not appear to be any more promising for the Czech and Slovak republic, and Hungary. The CSFR's fairly low inflation rate and debt of just over \$9 billion had led observers to be positive about its prospects for transition to a market economy. However, the proposed dissolution of the two republics by September this year is bound to slow down economic reform. Fundamental economic development only commenced in January 1991, a year after the Velvet Revolution when Vaclav Havel took over as President. Unemployment has increased from 63,000 people in December 1990 to 206,000 at the end of May 1991.

CSFR's economic performance deteriorated during 1990 - industrial production fell by 15 percent.¹² Privatisation is occurring in phases. Small privatisation started at the end of January 1991 while on a large scale, involving a voucher scheme and auctions, it commenced only towards the end of the year.

Hungary has experienced the same downturn in the economy, with a decline of 5.6 percent in GDP in 1990. Despite a restrictive monetary policy, inflation increased during 1990 and the consumer price index rose annually by 30 percent. The

12. Commission of the European Communities, European Economy, August/September 1991, p.2.

performance of the economy in 1991 has been mixed with industrial production declining but inflation being lower than forecast. A positive swing in Hungary's shift to a market economy is in the area of external trade where a surplus of \$127 million was recorded in convertible currency trade.¹³

In the area of privatisation, some re-thinking is needed with the failure of the first programme in September 1990 to privatise Hungary's twenty most profitable enterprises. In May 1990, the freely elected multi-party Parliament extended a vote of confidence to the centre-right coalition government of Premier Jozsef Antall's Hungarian Democratic Forum, Independent Smallholders' Party and Christian Democrats. It gives a fresh boost to the government to work towards transferring the economy (See Table VI for economic indicators for the region).

Hence, the policy for a regime change in the Central-East European economies has revolved round financial and currency stabilisation, liberalisation of prices, privatisation and an opening to the world economy. The effect that such a policy could have on environmental protection needs to be seen. A primary need is transfer of environment-friendly technology. There has been some relaxation in the Coordinating Committee for Multilateral Exports Controls (CoCom) restrictions to the region. The lists covered under this can be of three types - munition's list,

13. *ibid*, p.3-4.

atomic list and industrial/commercial list. It is relaxation over the last category that is important for technology transfer to the Central-East European countries.

A question that hangs over the economic reform programme of the Central-East European countries is whether the adoption of high environmental standards by industry should be regarded as a 'luxury' to be deferred until higher levels of outputs are reached. This is not a likely possibility since it has been proved that higher initial costs prove more energy-saving in the long run. Besides, there is a growing feeling of the need to remove pollution at source and ensure that new firms and existing industry comply with strict environmental directives.

The realisation within the Community is that without a solution to the environmental problems of Eastern Europe, no solution to the environmental problems of Europe is possible. By contributing to a 'clean up' in this region, the Community would be subsidising the cost of environmental protection within its own territory. It is important that the Community backs this realisation with financial support as lack of adequate financial resources could lead to the failure of the reform programme. Even today, extreme shifts in political power are being seen in Poland, social discontent in Hungary has led to a virtual boycott of existing parties, and nationalism is tearing apart the Czech and Slovak republics. Much needs to be done to revive the economies of the region else environmental reform would be restricted in its purpose and content.

Table - Basic economic data

		Bulgaria	Czechoslovakia	Hungary	Poland	Romania	Yugoslavia	Total Eastern Europe
Population	millions	9	16	11	38	23	24	120
Gross domestic product (a)	billion ECU	46	112	59	156	72	117	563
GDp per head (a)	ECU	5160	7163	5528	4137	3120	4956	4699
Annual growth rate 1985-89 (b)		2.7	2.1	0.9	1.8	1.1	0.3	--
Exports	billion ECU	2	6	5	8	6	3	31
Imports	billion ECU	4	6	5	7	3	3	27
Gross external debt end-1989	billion ECU	9	7	17	36	0	16	86
Net external debt end-1989	billion ECU	8	5	16	34	0	13	75
Net debt as % of GDP (a)		17	5	28	21	0	11	13
Net debt as % of hard currency exports		314	86	305	443	0	398	243
Interest as percentage of exports (c)		22	7	28	43	2	51	--
Inflation rate		2%	1%	17%	245%	1%	1240%	--
LIVING STANDARD INDICATORS								Average
Meat production (1989)	Kg/head	70	120	160	80	70	50	84
Automobiles (1987)	per 1000 persons	122	175	157	106	11	130	107
Life expectancy (1986)	years	71	72	69	70	70	72	71

All data refer to 1989, unless otherwise specified.

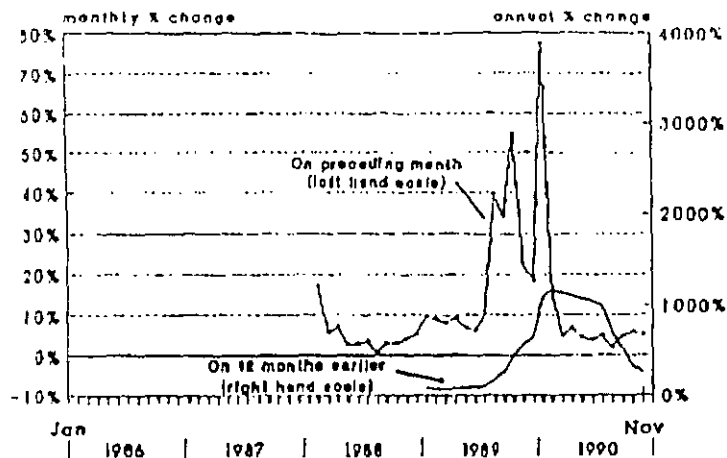
(a) GDP data were converted at US purchasing power equivalents.

(b) Based on official national data on net material product (gross social product for Yugoslavia) at constant prices.

(c) Net interest paid abroad as percentage of convertible currency exports. For Yugoslavia, interest plus amortization as percentage of current account receipts.

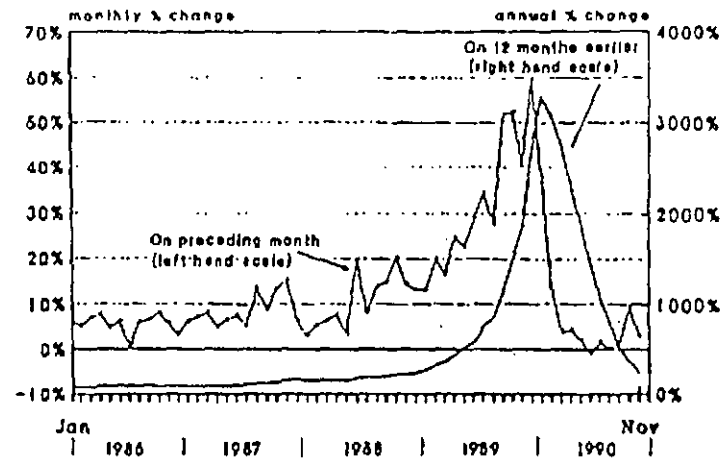
Source: Commission of the European Communities, D-G for External Relations, External Financing Requirements of the Countries of Central and Eastern Europe and the potential need for complementary financial support (Brussels), 15 October 1990.

INFLATION IN POLAND Consumer price index



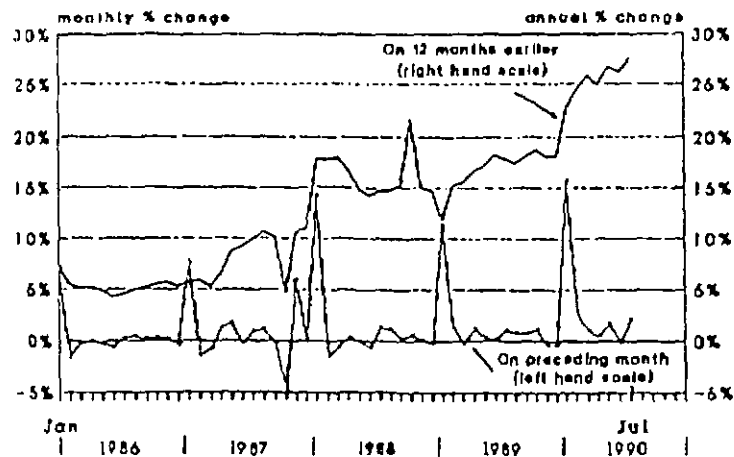
Source: IMF

INFLATION IN YUGOSLAVIA Consumer price index



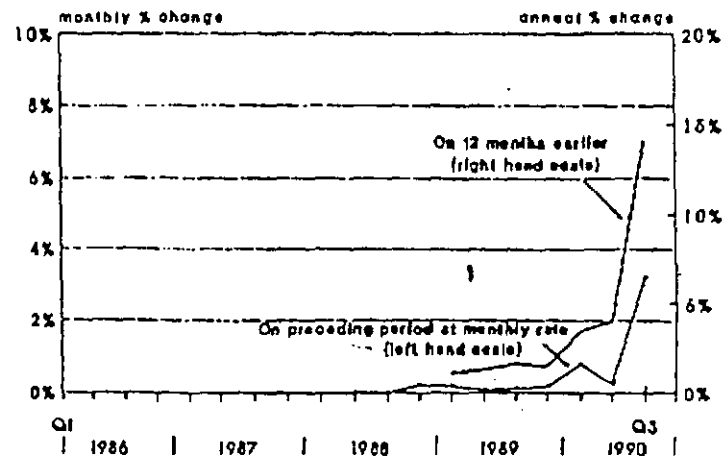
Source: IMF

INFLATION IN HUNGARY Consumer price index



Source: IMF

INFLATION IN CZECHOSLOVAKIA Consumer price index



Source: IMF

III

A key question to be asked with regard to the countries of Central-Eastern Europe is whether a second 'Marshall Plan'¹⁴ is the need of the hour. The Marshall aid programme initiated by the United States from 1947-52 provided 16 West European countries with \$12.4 billion in total, amounting to \$3.1 billion a year. In 1989 prices, this is equivalent to \$65.4 billion or \$16.4 billion a year.¹⁵

It is not an unrealistic sum in terms of Western GDP/GNP. \$16.4 billion is about 0,3 percent of US GNP or the Community's GDP. However, the flow of aid that is trickling into the countries of Central-Eastern Europe today is a much more reluctant lending.

A prime reason cited for this is the lack of infrastructure in the Central-East European economies which would make it difficult for them to absorb a large inflow of resources. The workings of the market mechanism need to be revived and technological changes introduced gradually to revive the economy. In fact, the Central-East European countries would need more of a technical input to revive the economy.

14. Sidney B.Fay, "The Marshall Plan", reprinted in Current History, January 1989, pp.30-32.

15. *ibid*, no.13, p.13.

If environmental reconstruction is to occur in Central-Eastern Europe, the magnitude of the investment needed would have to parallel the Marshall Plan. A fair idea is given in a Report from the Warsaw Ministry of Environmental Protection¹⁶ which adopts a thirty year time frame. From 1991-96, attempts would be made to address immediate threats to health in areas like Upper Silesia. By 2000 AD alone would it be possible to achieve compliance with EC standards and adopt by 2020 AD a course of "sustainable economic development" that integrates ecological concerns. To achieve these goals, an estimate of \$260 billion has been put forward by the Polish government.

The combined Community/G-24 assistance in all projects is unlikely to reach such a sum. A clearer direction the Community would need to move into is away from a 'project-oriented' approach into outlining and following clearer policies. The Community/G-24 countries have not expressed any clear indication about continuing the assistance into the new century. But, as outlined in the proposal by the Polish government, longer-term objectives by the Community need to be placed forward. This would strengthen the reform programme by reviving the economy as well as achieving the environmental objectives.

16. Ecological priorities in Poland and their estimated costs (Warsaw: Ministry of Environmental Protection, Natural Resources and Forestry, 1990).

CONCLUSIONS: RELEVANCE FOR INDIA

In an analysis of global environmental issues, the World Resources Institute gives a realistic assessment of the enormity of the world's tasks, claiming "the era we are now entering is new in human experience."¹

Much the same can be said for the European Community's leadership of the PHARE/G-24 Programme of Assistance to Central and Eastern Europe. The gravity of the environmental degradation in these regions caused in a period over four decades has come to light following the unprecedented systemic revolutions in these countries. The degradation has resulted from a continuous emphasis on resource-intensive activities such as coal-mining, steel-making, chemical industry and heavy manufacturing - all a legacy of post-war industrial economies. Inefficient use of energy has been a major contributing factor. Air pollution, water pollution and contamination of soil by carcinogenic heavy materials pose an environmental hazard.

The environmental situation in India cannot be considered to be on parallel with that of the Central-East European countries. However, one similarity is the shared problem of pollution. The three sources of industrial pollution in India are smoke from

1. The Crucial Decade: The 1990s and the Global Environmental Challenge (Washington D.C.: World Resources Institute, 1989), p.1.

chimneys, untreated effluents discharged in rivers and canals, and mixing of chemical gases in the atmosphere. According to the Central Board for Water Pollution, only eight cities in India are provided with complete sewage treatment facilities.²

The attempts of the Central-East European countries in coping and solving this crisis has a valid experience for India which is as follows:

- (i) Central planning was responsible for contributing to the ecological degradation of Central and Eastern Europe but the change to market-oriented economies does not automatically imply that there would be a better quality of the environment. Market pressure does induce efficient use of resources but it does not imply that there would be a link between economies and ecological concerns;
- (ii) Eastern Europe uses up three times as much energy per unit of output than the West. Energy efficiency is an essential factor in reducing levels of emissions and pollution;
- (iii) The best approach to prevent pollution and, at the same time, preserve the natural resource base is to reduce pollution "at source" by tapping the experience of the West;
- (iv) The major cause of water pollution in Eastern Europe is deferred investment in waste-water treatment by municipal authorities and industrial polluters. A prerogative for its removal is sewage treatment;

2. Arun C.Vakil, Economic Aspects of Environmental Pollution in India (Bombay), 1984, p.98.

- (v) One-third of the forests in Eastern Europe are damaged by air pollution and preservation demands clean air and fresh reforestation measures; and
- (vi) There is a great need among the countries of Central-Eastern Europe for financial assistance, pollution control equipment and capital for updating of outmoded industrial processes. Such updating increases efficiency and productivity with immediate effect, but the payback period for investment in pollution control devices will be lengthy.

A strong economy is the backbone upon which the introduction of such pollution-free technologies can occur. Shortly after the rise of democratic movements in the Central East-European countries in 1989, one of the fears of developing countries like India was of increased competition from them for OECD aid, commercial bank loans and foreign direct investment. This type of a scenario has not taken place as the countries of Central-Eastern Europe are dominated by attempts at stabilisation and structural adjustment.

Even as India has recently gone in for a structural adjustment programme, there is much that the two regions can learn from each other:³

3. See Tony Killick and Christopher Stevens, "Eastern Europe: lessons on economic adjustment from the Third World", International Affairs (London), vol.67, no.4, October 1991, pp.679-97.

- (i) In the sequence of economic reforms, there is a strong lobby for the 'stabilisation first' approach though this can restrict the ensuing structural adaptation;
- (ii) Income change following adjustment programmes is likely to put many groups of poor at risk. Measures to alleviate social costs need to be incorporated;
- (iii) Contrary to all preoccupation with privatisation, a large economic role for the state is desirable as there are obstacles in the rapid and successful privatisation of state enterprises; and
- (iv) Committed and stable political leadership is essential since aid would otherwise prove to be ineffective.

The strength of the institutions of the European Community lies in their resilience and ability to pursue a sustained policy. This is evident in the role of environmental policy both within the frontiers of the European Community and its international dimension.

The European Community has signed trade, commercial and economic cooperation agreements with Hungary on 26 September 1988, Czech and Slovak Republics on 19 December 1988 and Poland on 19 September 1989. Such Association Agreements are a special privilege as they carry the implication of future membership of the Community. The first country to have been made Associate member of the European Coal and Steel Community in 1951 was Great Britain.

Thereafter, eighteen states of Africa and the Malagasy Republic received associate status. However, they preferred to change the definition from "associateship" to "partnership".

The signing of association agreements with the Central-East European countries reflects the priority that this region occupies for the European Community. Proximity of the countries within the same continent is undoubtedly a vital reason. The European Community has been at the forefront of adopting new measures for environmental protection. It makes sound sense to ensure that such a policy with its strict standards are not observed simply in a few countries of Western Europe, but also in the East from where the main source of pollution originates. As the Community moves towards a European Union later this year, the signing of the agreements also reflects the Community's desire to orient the former Communist bloc countries into a Western system of democracy and market capitalism.

The Community's perception of India is in a completely different category of "non-associated developing country" in the region of Latin America and Asia (LAA). The parameters by which EC-India relations are measured is not in the same priority, but still meaningful. The Community and its member-states have long formed the largest source of official development assistance - 47 percent of the total assistance provided in 1988 (0.45 percent of the GNP of the Community) equalling US \$20.1 billion.

The link between economic development and environmental protection has been a recent focus of Community attention. The European Commission and European Investment Bank signed a Declaration on the Integration of Ecological Measures into executing economic development activities, following a meeting of the Committee of International Development Institutions on the Environment (CIDIE) at New York on 1 February 1980. A Council resolution in March 1992 spoke of the need for "global strategies... (and) programmes of sustainable development particularly in developing countries" and "the promotion of policies and programmes designed to improve the quality of human life worldwide through more equitable distribution of natural resources, alleviation of poverty, food security, improved health standards and life expectancy."

Hence, environmental cooperation between the EC-LAA countries has become an integral part of the Community's policy of development cooperation in this region. The European Community (EC) has stressed the objective of environmental cooperation involving environmental impact assessment of its programmes of assistance and the allocation of a minimum of 10 percent of its cooperation effort⁴ (financial, technical or economic) for

4. Commission of the European Communities, Guidelines for Cooperation with the Developing Countries in Latin America and Asia (Brussels), 11 June 1990, p.39.

financing projects specifically aimed at the environment. This is quite a significant sum for the region, indicating the seriousness of the Community's purpose.

Environmental protection thus constitutes an important feature in various aspects of the Community's international associations. One of the possibilities that could be explored is whether a similar programme could exist in South Asia. The proposal for a South Asia Environmental Protection Fund was mooted at the Third South Asian Association for Regional Cooperation (SAARC) Summit at Kathmandu (1987) and Fourth SAARC Summit at Islamabad (1988).⁵ An agenda of our items was defined - cooperation for prevention and reduction of natural disasters and improvement of environment; impact on region of Greenhouse effect; SAARC 2000: A Basic Needs Perspective; and establishment of Centre for Human Resource Development.

The relevance of the European Community as a model of integration for SAARC is, however, offset by divisions in South Asia which would make such a model almost impossible to implement. The European Community's coherence in defining the objectives of its environmental policy have been guided by a foundation of shared political values and norms, a mode of resolving disagreements

5. K.K.Bhargava, "The SAARC: Challenges and Opportunities" in K.B.Lall, H.S.Chopra, Thomas Meyer, ed., The European Community and SAARC (New Delhi: Radiant, 1992).

through both legal recourse and consensus-building and the fact that the Community rests on a model of shared political community. Such values have been based on various movements towards European unity dating back several centuries, and would be difficult to create in the young South Asian region.

A final observation is that the importance given to the environmental factor in the Community's programme of assistance to Central-Eastern Europe has been a response to a crisis situation. The dangers of radiation and transboundary pollution caused by the Chernobyl disaster alerted the West European countries of the impending threat of another such occurrence if preventive action is not taken. India, too, has experienced a tragedy of the dimension of 'Bhopal' but its long-term impact has been localised.

The drafting of a suitable policy for environmental protection has to take into account such disasters which can alter the environment in just one generation. India has to ensure that such environmental negligence does not occur again and adopt a sound approach that integrates the environment into a policy of coherent, sustainable development.

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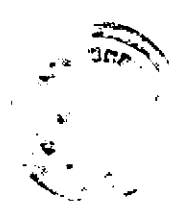
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