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‘Only One Earth’: Environmental Perceptions and Policies before the Stockholm Conference, 1968–1972

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Abstract

This article examines the emergence of global environmental perceptions and policies in the preparatory phase of the UN Conference on the Human Environment 1968–1972, based on an internationally comparative study of sixty-three preparatory country reports. Located at the intersection of global, knowledge, environmental and political history, the article raises two theses. First, that ‘the environment’ emerged as a field of knowledge in not only capitalist industrial societies but globally, thus in socialist and non-industrial societies too. Second, the article demonstrates a large overlap of environmental policies taken across geographical and ideological lines. Thus, the article sheds light on the understanding of environmental problems as well as national and international environmental policy measures around 1970 and thereby contributes to the question of how environmental governance emerged as a global field.

Keywords: environmental policy; UN conference; comparative history; growth paradigm; 1970s; environmental revolution

In the second half of the 1960s, interest in environmental issues rose sharply in industrialised countries, both capitalist and socialist. Side effects of the economic boom became apparent: contemporaries perceived pollution, noise, waste, and pesticides increasingly as environmental problems.¹ Against the backdrop of mounting environmental disasters and pollution incidents, environmental movements demanded action to safeguard the planet’s future. The issue was also taken up by the United Nations (UN). In 1968, the General Assembly resolved to hold a Conference on the Human Environment (UNCHE), also called the Stockholm Conference.² Shaped by the slogan ‘Only One Earth’, the UNCHE took place in Stockholm from 5–16 June 1972, with 1,250 delegates from 113 countries.³ The outcome – a declaration and an action plan with 106 recommendations – was judged controversially concerning effectiveness and bindingness, both by contemporaries and in the scientific literature.⁴ However, these documents did

¹Jan-Henrik Meyer, ‘From Nature to Environment: International Organizations and Environmental Protection before Stockholm’, in *International Organizations and Environmental Protection: Conservation and Globalization in the Twentieth Century*, ed. Wolfram Kaiser and Jan-Henrik Meyer (New York, Oxford: Berghahn, 2017), 50.

²General Assembly, 23rd Session, Resolution 2398, A/L.533, adopted 3 December 1968, in *Yearbook of the United Nations 1968*, ed. Office of Public Information United Nations, 22 (New York: UN Department of Public Information, 1971), 476–7.

³United Nations Office of Public Information, Press Release HE/123, 5 June 1972, United Nations Archives (hereafter cited as UNA), S-0913-0016-01.

⁴For assessments of the UNCHE by contemporaries see: Norman Faramelli, ‘Toying with the Environment and the Poor: A Report on the Stockholm Environmental Conferences’, *Boston College Environmental Affairs Law Review* 2/3 (1972): 469–86; F. H. Knelman, ‘What Happened at Stockholm’, *International Journal* 28/1 (1972): 28–49; George P. Smith, ‘Stockholm: Summer of ’72. An Affair to Remember’, *American Bar Association Journal*, no. 11 (1972): 1194–7.

represent the first consensus on global environmental policy and led to the establishment of the UN Environment Program (UNEP).⁵

While the conference itself is historically well-studied, two desiderata can be identified: first, there is no systematic examination of the knowledge and policies generated in the preparatory process.⁶ Second, many works have analysed this global phenomenon from a national and Eurocentric perspective, while internationally comparative works have been scarce. This article addresses these gaps by examining the emergence of global environmental perceptions and policies in the UNCHE framework, based on an international comparative study of preparatory country reports. Most UN member states systematically addressed environmental issues for the first time as part of the preparations for the UNCHE. The Preparatory Committee received many studies from UN sub-organisations, national governments, NGOs, and academics.⁷ The governments of eighty-five UN member countries and yet-to-be members like the German Democratic Republic (GDR) produced reports on the state of the environment. These reports have been mentioned in the extensive literature on the topic but have not been analysed systematically. Therefore, I investigate which environmental problems national administrations and their scientific advisors identified around 1970 and which policy measures they implemented. Since scientific data represented a powerful tool in the development of environmental policy, examining the knowledge generated in the preparatory phase of the UNCHE is significant for understanding the global relationships among environment and politics in the early 1970s. This article contributes to the existing literature on the UNCHE and global environmental policies by refuting the common notion that ‘the environment’ emerged as a field of knowledge and action in only industrial, western societies.⁸ It challenges the approaches of environmental historians who tend to ignore the role of non-western actors and spaces despite the ‘global’ aspiration of their analyses. It especially complicates Joachim Radkau’s claim in his book *The Age of Ecology: A Global History* that the ‘ecological revolution’ around 1970 was predominantly a ‘Western’ event led by the environmental movement.⁹ The history of the preparatory process of the UNCHE shows that various state and to some extent also non-state actors from diverse world regions and economic systems dealt with environmental knowledge and environmental practices. Therefore, this article argues that ‘the environment’ as a field of knowledge and action emerged all around the world and in non-industrial and socialist societies as well.

The main sources used are the country reports of UN member countries. Of the total eighty-five reports, seventy-one are archived in thirteen volumes at the Dag Hammarskjöld Library (DHL) at the UN Headquarters in New York. The report from Uganda is archived in the UN

⁵Kaiser and Meyer, ‘Introduction: International Organizations and Environmental Protection in the Global Twentieth Century’, in *International Organizations and Environmental Protection*, 6.

⁶See e.g. Enora Javaudin, ‘Environmental Problem-Solvers? Scientists and the Stockholm Conference’, in *International Organizations and Environmental Protection*, ed. Kaiser and Meyer, 74–102; Thorsten Schulz-Walden, *Anfänge globaler Umweltpolitik: Umweltsicherheit in der internationalen Politik (1969-1975)* (Munich: Oldenbourg, 2013); Kai F. Hünemörder, *Die Frühgeschichte der globalen Umweltkrise und die Formierung der deutschen Umweltpolitik (1950–1973)* (Stuttgart: Steiner, 2004); Lynton Keith Caldwell, *International Environmental Policy: From the Twentieth to the Twenty-First Century*, 3rd ed. (Durham: Duke University Press, 1996); John McCormick, *The Global Environmental Movement: Reclaiming Paradise* (London: Belhaven Press, 1992).

⁷Office of Public Information United Nations, ed., *Yearbook of the United Nations 1972*, 26 (New York: UN, 1975), 319.

⁸Examples of this notion are found explicitly in Joachim Radkau, *Die Ära Der Ökologie. Eine Weltgeschichte* (Munich: C.H. Beck Verlag, 2011), 137; and Jens Ivo Engels, ‘Modern Environmentalism’, in *The Turning Point of Environmental History*, ed. Frank Uekötter (Pittsburgh: University of Pittsburgh Press, 2010), 119–31; as well as implicitly in Astrid Mignon Kirchhof and John Robert McNeill, eds., *Nature and the Iron Curtain: Environmental Policy and Social Movements in Communist and Capitalist Countries 1945-1990* (Pittsburgh: University of Pittsburgh Press, 2019); Patrick Kupper, *Umweltgeschichte* (Berlin, Vandenhoeck & Ruprecht, 2021); and John McCormick, *Reclaiming Paradise*, xv.

⁹Radkau, *Die Ära Der Ökologie*, 137.

Library in Geneva. The remaining thirteen reports are missing for different reasons: The reports from Algeria, Austria, Italy, Ivory Coast, and Niger are untraceable due to storage errors or were not included in the volumes; the reasons are unclear. The reports from Burundi, Saudi Arabia, Turkey, Jordan, Thailand, Tunisia, Luxembourg, and Malawi were submitted after February 1972 and were therefore too late to be included in the volumes. From the total of seventy-two archived reports, the study analyses sixty-three English and French reports.¹⁰ The reports in Spanish elude my linguistic expertise, which means that Latin American countries are strongly under-represented in the analysis.¹¹

From a source-critical point of view, the country reports were compiled by state representatives and scientists specifically for the preparation of the UNCHE¹² and represented a part of the 'basic papers' for later conference resolutions.¹³ Thus, they are documents written by political and intellectual elites and were assumedly tactically used to advance self-interests. They did not reflect the actual situation of the environment but were a selection of data, arguments, perceptions, and policies of experts and diplomats they were willing to share internationally. For context and background information, I examined the archival sources of the Conference Secretariat in the United Nations Archives (UNA) in New York and from the Papers of the Secretary-General of the Conference, Maurice Strong, in the Environmental Science and Public Policy Archive (ESPPA) at Harvard University.

Methodically, the analysis follows a global historical comparison using the variation-finding approach developed by Charles Tilly.¹⁴ This approach aims at creating typification of the different identifications of environmental problems and the measures chosen in the reports. Three levels of comparison are considered: I analyse how the identification of environmental problems and policy measures mentioned in the reports differed first between world regions, second between capitalist and socialist countries, and third between industrialised and non-industrialised nations. This approach enables the classification of the national reports into their overarching global contexts, and to identify global variations. The division of the countries according to world regions is based on the UN's concept of macro-regions, which enables to investigate whether there were regional differences. Regarding the economic and political systems, the reports are divided into three sub-categories: first, eastern-European 'real-socialist' states (Czechoslovakia, GDR, Hungary, Poland, Romania, and Yugoslavia); second, states with socialist declarations in their constitutions but otherwise relatively few characteristics of a socialist economy and society (Egypt, Ceylon, India, Iraq, Pakistan, Senegal, Sudan, and Syria); and third, capitalist states. Socialist states are divided into two categories, as there were major differences in the implementation of socialist ideals in everyday life and political practice between states that called themselves socialist. The classification of countries according to their level of industrialisation is a difficult task and often problematic. Even though there exist various attempts for classifying, the questions about which data can best capture the complex socio-economic reality and how conclusive single parameters

¹⁰Afghanistan, Australia, Belgium, Botswana, Brazil, Burma, Cameroon, Canada, Central African Republic, Ceylon, Chad, Cyprus, Czechoslovakia, Denmark, Democratic Republic of the Congo (DRC), Egypt, Federal Democratic Republic (FDR), Finland, France, Gabon, GDR, Ghana, Greece, Haiti, Hungary, Iceland, India, Indonesia, Iran, Iraq, Ireland, Israel, Jamaica, Japan, Kenya, Kuwait, Madagascar, Malaysia, Malta, Morocco, Nepal, Netherlands, New Zealand, Nigeria, Norway, Pakistan, Philippines, Poland, Portugal, Romania, Senegal, Singapore, Sudan, Swaziland, Sweden, Switzerland, Syria, Togo, Uganda, Ukraine, UK, USA, Yugoslavia.

¹¹Argentina, Bolivia, Chile, Ecuador, Guatemala, Mexico, Peru, and Spain.

¹²In the case of some eastern and western European countries, the reports were initially used for the 1971 Prague Symposium organised by the UN Economic Commission for Europe. See Iris Borowy, 'The 1971 Prague Conference on Problems Related to Environment: A Forgotten Contribution to International Environmentalism', *Environment & Society Portal* 11 (2019), doi:10.5282/RCC/8505.

¹³United Nations Conference on the Human Environment, Press Release HE/118, 15 March 1972, UNA, S-0913-0016-01.

¹⁴Charles Tilly, *Big Structures, Large Processes, Huge Comparisons* (New York: Russel Sage Foundation, 1984).

can be, remain open. Besides limitations of existing classification attempts, data for 1970 to 1972 is only available for thirty-eight of the total sixty-three countries studied. Therefore, the classification of countries according to their degree of industrialisation is based on the self-designation in the reports. For those countries where data exists, the self-designation was reviewed against the share of the secondary sector in GDP according to the World Development Indicators and the ten-sector database of the Groningen Growth and Development Centre.¹⁵ Overall, I distinguish between industrialised countries, non-industrialised countries, and ‘transition’ countries. The comparative analysis of the reports was carried out using content-structuring qualitative content analysis.¹⁶ Following this method, I started the analysis with a few main categories derived deductively from the research questions, then inductively formed subcategories from the source material before I coded and evaluated the entire source material based on this category system with the computer-assisted qualitative data analysis program MAXQDA.

The period under review concerns the preparatory process of the UNCHE, 1968–1972. Existing research shows that comprehensive environmental policy especially on a national and to a lesser extent also on an international level developed during this period.¹⁷ However, the increased preoccupation with the environment around 1970 had political and social precursors. Conceptually, the ecological consequences of industrialisation had been subject to discussion since its very beginning.¹⁸ Institutionally, the UN was not the first international organisation and the UNCHE was not the first international conference to address environmental issues.¹⁹ Nonetheless, only the Stockholm Conference represented the attempt to deal with environmental problems comprehensively and globally, since non-industrialised and socialist countries were included.²⁰

Following this introduction, I will discuss the political context in which the country reports were created. In the third sections, I question which topics and problems the authors of the reports perceived as environmentally relevant. The fourth section analyses and compares the environmental measures taken up to spring 1972. The conceptualisation of environmental policies in the framework of the UNCHE fuelled discussions about the relationship between economic growth and environmental protection, which is why the depiction of this relationship in the reports is analysed in the fifth section. Through this, the paper presents new insights into the understanding of environmental problems and environmental governance of state actors and their scientific communities around the globe by 1970 and contributes to the question of how environmental governance emerged as a global field of knowledge.

The preparatory process and the context of the origin of the country reports

‘The Conference – through its preparatory process – was developed to provide peoples [sic!] and governments with an indication of the major areas of environmental concern and the measures required to respond effectively to these concerns’, stated a UN press release in March 1972.²¹ It was

¹⁵Marcel Timmer et al., ‘Patterns of Structural Change in Developing Countries’, in *Routledge Handbook of Industry and Development*, ed. J. Weiss, and M. Tribe (Abingdon: Routledge, 2015), 65–83, online: <https://www.rug.nl/ggdc/structural-change/previous-sector-database/10-sector-2014>; World Bank, World Development Indicators, <https://databank.worldbank.org/home>.

¹⁶Udo Kuckartz, *Qualitative Inhaltsanalyse. Methoden, Praxis, Computerunterstützung*, 4th ed. (Weinheim: Beltz Juventa, 2018).

¹⁷John Robert McNeill, *Something New Under the Sun: An Environmental History of the Twentieth-Century World* (London: Penguin Books, 2001), 336.

¹⁸Frank Uekötter, ‘Wie neu sind die Neuen Sozialen Bewegungen? Revisionistische Bemerkungen vor dem Hintergrund der umwelthistorischen Forschung’, *Mitteilungsblatt des Instituts für soziale Bewegungen* 31 (2004): 115.

¹⁹See Kai F. Hünemörder, ‘Vom Expertennetzwerk Zur Umweltpolitik: Frühe Umweltkonferenzen und die Ausweitung der öffentlichen Aufmerksamkeit für Umweltfragen in Europa (1959–1972)’, *Archiv Für Sozialgeschichte* 43 (2003): 275–96.

²⁰Brian Johnson, ‘The United Nations’ Institutional Response to Stockholm: A Case Study in the International Politics of Institutional Change’, in *International Organization* 26/2 (1972): 256–9.

²¹United Nations Conference on the Human Environment, Press Release HE/118, 15 March 1972, UNA, S-0913-0016-01.

the declared goal of the UNCHE to gain insights into environmental problems and explore opportunities for environmental policy. To achieve this, the UN Secretary-General, Sithu U Thant, asked the member states to prepare a country report in April 1970.²² Simultaneously, a working group of the Preparatory Committee drew up recommendations for the structure of the country reports, to which most countries adhered.²³ First, they described the existing environmental problems, before they discussed existing, planned, and desired measures at the national and international levels. In September 1970, the Conference Secretariat drew up a three-stage concept of the preparatory phase and decided that the basis of this concept and thus the basis of the conference was the call for reports from the member states, among other documents from NGOs and consultants.²⁴ One result of this three-stage concept was the renowned report by Barbara Ward and René Dubos, 'Only one Earth'.²⁵

Around 1970 however, non-industrialised countries were especially sceptical about the UNCHE. Representatives argued that environmental problems were caused mainly by the industrialised countries and that for non-industrialised countries, other problems such as poverty and hunger were more urgent.²⁶ Mostafa Tolba, a member of the Egyptian preparation committee, summarised: 'None of us [ministers from developing countries] ever accepted the idea of environment as an important issue. We considered [...] that environment is the problem of the rich. They [...] try to block our own development under the guise of protecting the environment.'²⁷ Actors from non-industrialised countries saw pollution as a sign of industrial 'development' and therefore as something desirable. To convince non-industrialised countries to participate, the conference secretariat took several measures, including a meeting in Founex, to identify the problems and needs of these countries in the environmental sector.²⁸ The Founex Report produced at this meeting was the first conceptual basis for the idea that environmental protection and economic 'development' were compatible.²⁹ The efforts of the preparatory committee eventually led to the participation of over seventy non-industrialised countries, but conflict about the relationship between environmental protection and 'development' remained.³⁰

Ultimately, 115 governments participated in the preparatory process and the drafting of the basic papers by March 1972.³¹ Eighty-five states submitted country reports totalling 4,042 pages, representing the first global identification of environmental problems, as Maurice Strong noted in 1971: 'There had now been collected an unprecedented amount of material on the environment which represented the first global assessment ever carried out'.³² The preparatory committee

²²UN Centre for Economic and Social Information, Background Note No. 182, April 1970, Environmental Science Public and Policy Archive (hereafter cited as ESPPA), Maurice F. Strong Papers 1948–2000, Box 42, Folder 414.

²³Preparatory Committee for the UNCHE, Suggested Outline for National Reports, 9 March 1970, ESPPA, Peter S. Thacher Environment Collection, 1960–1996, Box 14, Folder 122.

²⁴Opening Remarks by Maurice Strong at the Informal Meeting of the Preparatory Committee, 9–10 November 1970, UNA, S-0858-0005-06.

²⁵René Dubos and Barbara Ward, *Only One Earth: The Care and Maintenance of a Small Planet* (New York: Norton, 1972).

²⁶Lars Goran Engfeldt, *The United Nations and the Human Environment, 1973*, ESPPA, *Maurice F. Strong Papers 1948–2000*, Box 28, Folder 278, p. 394.

²⁷Interview transcript Mostafa Tolba by Thomas G. Weiss, UN Intellectual History Project, Cairo, 18 May 2001, 42.

²⁸Panel of Experts on Development and Environment, Geneva, 4–12 June 1971, ESPPA, Maurice F. Strong Papers 1948–2000, Box 40, Folder 398.

²⁹United Nations, ed., *Development and Environment: Report and Working Papers of a Panel of Experts Convened by the Secretary-General of the United Nations Conference on the Human Environment (Founex, 1971)* (Paris: UN, 1972). See also Michael Manulak, 'Developing World Environmental Cooperation: The Founex Seminar and the Stockholm Conference', in *International Organizations and Environmental Protection*, 103–27.

³⁰Iris Borowy, 'Before UNEP: Who Was in Charge of the Global Environment? The Struggle for Institutional Responsibility 1968–72', *Journal of Global History* 14/1 (2019), 102.

³¹United Nations Conference on the Human Environment, Press Release HE/119, Statement of Secretary-General of UN Conference on Human Environment at Press Briefing on 15 March 1972, UNA, S-0971-0006-01.

³²Briefing by Maurice Strong for United Nations Secretariat, 15 September 1971, UNA, S-0858-0005-06.

Many reports do not provide much information on authorship, sources, and methods. Nevertheless, a variety of research disciplines and institutions were involved in the process, and most authors had an academic background. The reports were based on existing and newly collected material and statistics from government agencies, ministries, and scientific institutions. Regarding the methods used, much remains unclear. However, twenty-two of the sixty-three analysed reports included a trend extrapolation into the future.³⁷ The predictions ranged from 1975 to 2000 and were calculated using computerised data processing methods. As a method of future research, the use of trend extrapolation is to be viewed in the context of a boom in future predictions in the late 1960s.³⁸ The link between past, present, and future environmental concerns is exemplified by the Ukrainian report: 'Information on the past state of natural resources is widely used and forecasts are made of their future development since without these data, it is impossible to assess the current state of natural resources or to form any idea of their future'.³⁹ The authors of the reports inextricably linked concern for the environment with questions about the future. In previous research, it was assumed that the increased concern with the future in relation to environmental problems was primarily a phenomenon of industrialised countries.⁴⁰ This cannot be confirmed based on the reports examined here: among the twenty-two reports using trend extrapolation, ten were from non-industrialised countries, while seven were from industrialised and five from transition countries. Likewise, besides socialist planned economies like Romania, Poland, and Ukraine, capitalist countries also relied on trend extrapolations to predict the future.⁴¹ Futurological methods were thus by no means a marginal phenomenon of a small local scientific community but had found their way into government reports worldwide. This finding speaks to the main argument of the article about environmental knowledge and practice not only emerging in industrialised, western countries. Overall, although the preparatory process was marked by conflicts and negotiation processes, the systematic compilation of environmental problems and solution approaches in the reports represented a global increase in environmental knowledge.

Pollution, population, and poverty: Environmental problems around 1970 in global comparison

The preparatory process of the UNCHE led to a global elicitation of environmental knowledge. The following section analyses the problems this encompassed: how did environmental concerns differ according to countries, the degree of industrialisation, the organisation of their economies, and their geographical location? The reports highlighted that the earth's resources are limited and that human use of these resources causes environmental problems. The Afghan Report stated: '[...] the world's ills involve the three P's – pollution, population, and poverty'.⁴² This assessment concurs with the three main problem areas the reports identified: environmental problems related firstly to the industrialisation and intensification processes, secondly to population growth, and thirdly to poverty and low living standards.

The first main problem area according to the reports – *environmental problems related to industrialisation and intensification*, which then resulted in pollution and overexploitation – concerned most countries studied. Fifty-three reports (84%) attributed environmental problems

³⁷CR of Afghanistan, Brazil, Canada, DRC, Finland, FRG, India, Iraq, Iran, Ireland, Kenya, Kuwait, the Netherlands, Philippines, Romania, Sweden, Swaziland, Ukraine, the UK, the USA, Yugoslavia, DHL, UNA Conf.48 NR.

³⁸Jenny Andersson, 'The Great Future Debate and the Struggle for the World', in *The American Historical Review* 117/5 (2012): 1413.

³⁹CR Ukraine, DHL, UNA Conf.48 NR, 3.

⁴⁰Cf. Hünemörder, *Frühgeschichte der globalen Umweltkrise*; Lucian Hölscher, *Die Entdeckung der Zukunft*, 2nd edition (Göttingen: Wallstein, 2016), 307–8.

⁴¹The Ukrainian Soviet Socialist Republic was an independent UN member since 1945 and therefore authored its own report.

⁴²CR Afghanistan DHL, UNA Conf.48 NR, 1.

to industrialisation and related growth phenomena.⁴³ For example, the Hungarian report stated: 'Agricultural production is detrimental to water, air, soil, and vegetation. Industrial production is detrimental to water, air, soil, vegetation, areas, and objects. Urbanization [. . .] is detrimental to water, air, soil, vegetation, areas, objects, and man in a biological and psychic sense'.⁴⁴ Unsurprisingly, all nineteen industrialised and all eleven transition countries attributed pollution and overexploitation of resources to industrialisation processes. Accordingly, the main regions concerned were Europe, Oceania, and North America. However, non-industrialised countries were also affected, as twenty-one countries (58%) mentioned environmental pollution due to industrialisation processes.

The reports cited as causes of pollution, first, the modernisation and industrialisation of agriculture through artificial fertilisers, chemical pesticides, and motorised machinery (thirty-seven of sixty-three reports).⁴⁵ In the US, for example, one-tenth of the land (eighty million hectares) was treated with pesticides.⁴⁶ The second mentioned cause was the discharges, pollutants, and noise emissions of industries (thirty-five of sixty-three).⁴⁷ For instance, heavy metals and toxic substances from industries such as lead and mercury damaged flora and fauna. The third cause of pollution was the increase of waste (twenty of sixty-three), which resulted in air, water, and soil pollution.⁴⁸ For example, according to the Polish report, the amount of waste discharged into water bodies in 1969 was equivalent to one-third of the annual surface runoff.⁴⁹ As the fourth cause, the reports indicated the increase in fuel combustion and motor vehicles, which led to air pollution resulting in acid rain (twenty-three of sixty-three reports).⁵⁰ In summary, environmental pollution was expressed vis-a-vis population density, urbanisation, industrialisation, and motorised traffic. The Indian report elaborated: 'Internal combustion engines, synthetic detergents, manmade fibres and plastic materials, antibiotics and pesticides were introduced with a useful purpose but [. . .] have created environmental pollution. [. . .] the pollution of the environment is fast reaching a stage where it will pose threat to the survival, reproduction, health, and wellbeing of the human beings'.⁵¹ This quotation underlines that one major concern in the reports was the threat to human well-being by environmental pollution.

Growth and intensification of population, cities, business, agriculture, transportation, and technology led to increasing pressure and overexploiting of natural resources, a problem identified by fifty-two reports (83%).⁵² The overuse of natural resources led to the destruction of natural plant

⁴³CR of Afghanistan, Australia, Belgium, Brazil, Burma, Cameroun, Canada, Ceylon, Chad, Cyprus, Czechoslovakia, Denmark, DRC, Egypt, Finland, France, FRG, GDR, Greece, Hungary, Iceland, India, Indonesia, Iran, Iraq, Ireland, Israel, Japan, Kenya, Kuwait, Madagascar, New Zealand, Nigeria, Norway, Poland, Portugal, Netherlands, Philippines, Romania, Senegal, Singapore, Sudan, Syria, Swaziland, Sweden, Switzerland, Togo, UK, Ukraine, USA, Yugoslavia, DHL, UNACConf.48 NR; CR Uganda, UNLG.

⁴⁴CR Hungary, DHL, UNA Conf.48 NR, 27.

⁴⁵CR of Afghanistan, Belgium, Brazil, Burma, Cameroun, Ceylon, Chad, Denmark, DRC, Egypt, Finland, France, FRG, GDR, Hungary, Indonesia, Iran, Iraq, Ireland, Israel, Kenya, Madagascar, Malaysia, New Zealand, Norway, Poland, Portugal, Singapore, Sudan, Syria, Swaziland, Sweden, Switzerland, Ukraine, USA, DHL, UNACConf.48 NR.

⁴⁶CR USA, DHL, UNA Conf.48 NR, 26.

⁴⁷CR of Belgium, Brazil, Canada, Ceylon, Cyprus, Czechoslovakia, Denmark, DRC, Finland, France, FRG, GDR, Indonesia, Iran, Iraq, Ireland, Israel, Japan, Kuwait, Nigeria, Norway, Poland, Portugal, Netherlands, Philippines, Romania, Senegal, Syria, Sweden, Togo, UK, Ukraine, the USA, Yugoslavia, DHL, UNACConf.48 NR; CR Uganda, UNLG.

⁴⁸CR of Belgium, Brazil, Ceylon, Denmark, France, FRG, GDR, Iceland, India, Ireland, Israel, Japan, Kenya, Poland, Portugal, the Netherlands, Singapore, Sweden, Switzerland, the USA, Yugoslavia, DHL, UNA Conf.48 NR.

⁴⁹CR Poland, DHL, UNA Conf.48 NR, 21.

⁵⁰CR of Australia, Belgium, Brazil, Ceylon, Cyprus, Finland, France, FRG, GDR, Hungary, Israel, Japan, Jamaica, Kuwait, Portugal, Romania, Sweden, Singapore, Syria, the Netherlands, Philippines, Israel, Japan, the USA, DHL, UNA Conf.48 NR; CR Uganda, UNLG.

⁵¹CR India, DHL, UNA Conf.48 NR, 67.

⁵²CR of Afghanistan, Australia, Belgium, Botswana, Brazil, Burma, Cameroun, Canada, Central African Republic, Chad, Cyprus, Czechoslovakia, DRC, Egypt, Finland, France, GDR, Ghana, Greece, Hungary, Iceland, India, Indonesia, Iran, Ireland, Israel, Jamaica, Kenya, Malta, Madagascar, Malaysia, Malta, Morocco, Nepal, New Zealand, Nigeria, Norway, Pakistan, Poland,

cover (i.e., through deforestation and overgrazing), soil erosion, degradation of the water regime, floods and droughts, reduction of biodiversity, extinction of species (i.e., through overfishing), and pollution of water and air. Several reports noted that the use exceeds the earth's 'carrying capacity'. Overall, the reports demonstrate considerable knowledge of ecological interrelationships, outlining, for instance, how damage to surface vegetation and forest ecosystems had impacts on water regimes, soil quality, natural habitats, and biodiversity. This damage exacerbated natural events such as droughts, flooding, and erosion, which in turn increased pressure on natural resources even more.

The second main problem area mentioned in the reports was *population growth and urbanisation*. Population growth was problematised by forty-three of the sixty-three reports (68%) as a cause of environmental degradation.⁵³ Whether countries cited population growth as a problem or not had no discernible connection with the organisation of the economy, but mainly with the degree of industrialisation. Of the non-industrialised countries, 88% of the reports (twenty-nine of thirty-three) cited population growth as a problem, compared to 46% (eight of eighteen) of the industrialised countries. In non-industrialised countries, population growth was seen mainly as an economic problem because the demand for food, housing, education, and recreational areas increased, and the supply could not be ensured. Besides the problems of congestion, environmental problems also resulted from internal migration flows that resulted in urban growth. Remarkably, far more non-industrialised countries than industrialised ones expressed worries about population growth in the reports, although the concern had originated in the industrialised countries, and developing countries contributed only a fraction of the total resource consumption.⁵⁴ This may indicate the success of the Stockholm conference in identifying population issues as environmentally relevant for developing countries. However, the issue of population growth might also be omnipresent in the reports because the topic was used to assert demands for international assistance. The Ugandan report says, for example, 'the new concern for the environment [. . .] should inspire an increased flow of aid to [. . .] developing countries.'⁵⁵

The reports show that urbanisation was a globally widespread cause of environmental problems, as fifty-one reports (81%) mentioned this.⁵⁶ On the one hand, the global trend toward urbanisation brought issues in areas affected by out-migration: for example, endangerment of the landscape preservation due to farm abandonment, or loss of labour and taxpayers in rural areas.⁵⁷ On the other hand, urbanisation triggered problems in the areas affected by immigration. Issues named included congestion of the infrastructure resulting in pollution and spread of disease from waste, urban sprawl resulting in loss of agricultural land, air and noise pollution from increased traffic, destruction of wildlife habitat, land clearing, and land-use conflicts. Overall, the issues of population growth, urbanisation, and human settlements occupied much space in the reports of both capitalist and socialist countries. The enumerated problems mostly focused

Portugal, Senegal, Sweden, Switzerland, Sudan, Swaziland, Togo, the Netherlands, Philippines, Yugoslavia, UK, Ukraine, USA, DHL, UNA Conf.48 NR; CR Uganda, UNLG.

⁵³CR of Afghanistan, Australia, Botswana, Brazil, Burma, Cameroun, Canada, Central African Republic, Ceylon, Chad, Cyprus, Czechoslovakia, DRC, Egypt, Gabon, GDR, Ghana, Haiti, India, Indonesia, Iraq, Iran, Ireland, Israel, Jamaica, Kenya, Kuwait, Madagascar, Malaysia, Nepal, New Zealand, Nigeria, Philippines, Senegal, Singapore, Sudan, Swaziland, Sweden, the Netherlands, Togo, the UK, Yugoslavia, DHL, UNA Conf.48 NR; CR of Uganda, UN Library Geneva (UNLG).

⁵⁴Cf. Paul R. Ehrlich, *The Population Bomb* (New York: Sierra Club, 1968); Thomas Roberton, *The Malthusian Moment. Global Population Growth and the Birth of American Environmentalism* (New Brunswick: Rutgers University Press, 2012).

⁵⁵CR Uganda, UNLG, 87.

⁵⁶CR of Afghanistan, Australia, Belgium, Botswana, Brazil, Burma, Canada, Cameroun, Chad, Cyprus, DRC, Egypt, Finland, France, FRG, GDR, Ghana, Greece, Haiti, Hungary, India, Indonesia, Iraq, Iran, Ireland, Israel, Jamaica, Japan, Kenya, Kuwait, Madagascar, Malaysia, Malta, Morocco, New Zealand, Nigeria, Norway, Philippines, Poland, Portugal, Romania, Senegal, Singapore, Sudan, Swaziland, Sweden, Syria, the Netherlands, Togo, the USA, Yugoslavia, DHL, UNA Conf.48 NR.

⁵⁷CR of Canada, Cameroun, Cyprus, Finland, Hungary, Japan, Kenya, Portugal, Swaziland, Sweden, DHL, UNA Conf.48 NR.

on human welfare and economic considerations, rather than concrete ecological relationships. This is telling in terms of the understanding of environmental problems around 1970: within the UNCHE framework, social and economic phenomena were classified as important environmental problems.

The third main problem area mentioned in the reports was *poverty and 'under-development'*. As Maurice Strong stated: 'I think there is a growing recognition in both developed and developing regions that the environmental crisis is not just a matter of industrial pollution and that the environmental problems resulting from poverty are no less acute and certainly more widespread than those resulting from affluence.'⁵⁸ This quote illustrates that in the UNCHE preparatory process poverty and 'underdevelopment' were seen as environmentally damaging factors. Thirty-two reports (51%), including most of the non-industrialised countries, cited poverty as a cause of environmental problems.⁵⁹ Whether countries were socialist or capitalist did not make a significant difference, as nine of the fifteen (60 %) socialist countries and twenty-three of the forty-eight (48%) capitalist countries named poverty-related environmental problems. The main problems addressed were the lack of sewage and waste systems as well as poor sanitation, which led to the pollution of surface water, soil, and the spread of diseases. Like it was the case with population, social and economic phenomena played an important role in the discussion of poverty-related environmental damage. This addressing of environmental problems in terms of their economic and social consequences was also due to the findings of the Founex meeting and to the objections of non-industrialised countries that their environmental problems differed from those of industrialised countries.⁶⁰

Overall, the reports addressed a wide range of environmental problems. Unconsidered, however, were the issues of radiation pollution and man-made global warming. Why these topics were not discussed more intensively is unclear, because, in other publications for the conference such as the 'Only one Earth' report, these problems were debated thoroughly. Interdependencies among countries as well as neo-colonial power relations and their effects on the environment were also barely a topic in the reports. In sum, the country reports had three underlying perceptions of environmental problems: as a crisis and threat to human livelihoods, in their ecological and systemic interrelations, and as a transboundary and global phenomenon.

The first apprehension – the finiteness of the earth's resources and the threat to the future of the planet and mankind – was a common theme in the reports. For instance, the US report said: 'Despite man's effort to reach the stars and distant worlds in outer space, his environment today and in the foreseeable future [. . .] must continue to be defined by the natural limitations of one finite planet'.⁶¹ Using crisis rhetoric and buzzwords such as 'utmost importance' (Japan), 'serious situation' (Yugoslavia), or 'threat to human survival' (Singapore), the reports emphasised the urgency of the problems. These quotes show that the reports understood the environment also as a crisis concept, in the sense that the environment was closely linked to fears of the future.⁶²

The second problem understanding was the notion of the world as one interconnected and linked system. Ecological ideas were centrally represented in the reports, as in more than twenty reports, the keywords 'ecology' or 'ecological balance' were used.⁶³ However, besides ecological

⁵⁸Maurice Strong in CR DRC, DHL, UNA Conf.48 NR, 42.

⁵⁹CR of Afghanistan, Brazil, Burma, Cameroun, Ceylon, Central African Republic, Chad, DRC, Egypt, Gabon, Ghana, Haiti, India, Indonesia, Iraq, Jamaica, Kenya, Madagascar, Malaysia, Morocco, Nepal, Nigeria, Pakistan, Philippines, Togo, Senegal, Sudan, Syria, Swaziland, Yugoslavia, DHL, UNA Conf.48 NR; CR Uganda, UNLG.

⁶⁰Cf. Michael Manulak, 'Developing World Environmental Cooperation. The Founex Seminar and the Stockholm Conference', 103–27.

⁶¹CR USA, DHL UNA Conf.48 NR, 1.

⁶²Cf. Paul Warde and Sverker Sörlin, 'Expertise for the Future: The Emergence of Environmental Prediction c. 1920-1970', in *The Struggle for the Long-Term in Transnational Science and Politics: Forging the Future*, ed. Jenny Andersson and Egle Rindzeviciute (New York: Routledge, 2015), 39.

⁶³CR of Afghanistan, Australia, Brazil, Canada, Cyprus, DRC, Finland, France, India, Indonesia, Madagascar, New Zealand, Norway, Poland, Romania, Sweden, Switzerland, Sudan, UK USA, Yugoslavia DHL, UNA Conf.48 NR.

ideas, argumentations based on conflicting economic use interests are also found in the reports. Thus, it cannot be claimed that ecological ideas led to the displacement of economic reasoning in the evaluation of the environment.

The third perception assessed environmental problems as transnational and global. Terms such as ‘world community’ (Canada), ‘global concern’ (Japan), and ‘international solidarity’ (Chad and Madagascar) described the understanding that no country could escape the environmental consequences, or as the Canadian report stated, ‘The environment is a world environment. No country can entirely isolate itself from pollution elsewhere’.⁶⁴ The perception that environmental problems were urgent, complex, and global, also had implications for the actions taken.

Environmental policy measures around 1970 in global comparison

[...] the Czechoslovak Government has come to the conclusion that environmental problems cannot be solved by a mosaic of separate, mutually unrelated measures, and that the environment must, on the contrary, be viewed as a single complex problem the solution of which requires a [...] policy with a long-term perspective impact [...].⁶⁵

As the Czechoslovak report exemplarily underlines, solutions in the country reports were supposed to be conceptualised cohesively, holistically, and with a long-term perspective. However, while the reports showed an ecological understanding of the problems and viewed them as interrelated, most of the measures were sectoral, concerning only a specific environmental sector, for example, water, air, or soil.

Overall, seven types of environmental measures can be distinguished: legal, institutional, technical, planning, and economic, research and environmental education. Table 1 shows an overview of which states had implemented which measures. It demonstrates that the breadth of environmental policy forms applied varied widely among countries. Twenty-seven countries adopted more than five forms of measures, while sixteen mentioned only two or fewer forms.

The global comparison offers interesting insights: if the implemented measures are compared among world regions, slight differences are found in the form and frequency, but overall, no special solutions can be identified for certain world regions. The situation is similar regarding economic organisation: a comparison between capitalist and socialist countries shows that no preferred measures can be distinguished. More revealing is the breakdown of the implemented measures by the degree of industrialisation (Table 2). While all industrialised countries had three or more forms of environmental policy in place, almost half of the non-industrialised countries had fewer than three forms of measures. The degree of industrialisation is therefore the decisive factor in explaining differences and similarities among the number and type of environmental policies implemented in different countries.

In the following paragraphs, the seven policy types are examined and compared in more detail. By doing so, once again it becomes clear how widespread environmental policy was implemented around 1970 not only in industrialised but also in non-industrialised, in capitalist as well as socialist countries, even though the degree of industrialization influenced the scope of the measures, as explained above. Furthermore, the analysis demonstrates that there are various similarities in environmental policies between countries coming from different world regions and economic systems. Concurrently, the examination also shows that such rough categorisations, such as industrialised or non-industrialised countries are not sufficient, but that the diversity of ways in which environmental policies were dealt with around 1970 can only be captured through close reading.

⁶⁴CR Canada, DHL, UNA Conf.48 NR, 1.

⁶⁵CR Czechoslovakia, DHL, UNA Conf.48 NR, 15.

Table 1. Overview of the environmental policy measures taken

	Legal measures	Institutional measures	Planning measures	Research & Monitoring	Technical measures	Information & Education	Economic measures
Brazil							
Czechoslovakia							
GDR							
Japan							
Romania							
Sweden							
The Netherlands							
Ukraine							
Hungary							
Iran							
Israel							
New Zealand							
Poland							
Portugal							
Switzerland							
Singapore							
The Philippines							
The USA							
Denmark							
FGR							
France							
Greece							
Ireland							
Kuwait							
Malta							
Norway							
Uganda							
Australia							
Belgium							
Cameroun							
Canada							
Chad							
DR Congo							
Egypt							
Finland							
Indonesia							

(Continued)

Table 1. (Continued)

	Legal measures	Institutional measures	Planning measures	Research & Monitoring	Technical measures	Information & Education	Economic measures
Kenya							
Swaziland							
Senegal							
Togo							
The UK							
Botswana							
Central African Rep.							
Iceland							
Jamaica							
Madagascar							
Nepal							
Cyprus							
Morocco							
Nigeria							
Sudan							
Yugoslavia							
India							
Iraq							
Syria							
Afghanistan							
Burma							
Ceylon							
Gabon							
Ghana							
Haiti							
Malaysia							
Pakistan							
Total:	49 (78%)	39 (62%)	39 (62%)	38 (60%)	37 (59%)	25 (40%)	19 (30%)

The first policy type – *legal measures* – was the most widespread approach to solving environmental problems. In 1972, forty-nine countries (78%) had legal regulations on the environment in place (see [Supplementary material](#)).⁶⁶ Three different forms of legal measures can be distinguished

⁶⁶The whole subsection rests on the CR of Australia, Belgium, Botswana, Brazil, Canada, Chad, Cyprus, Czechoslovakia, Denmark, DRC, Egypt, FGR, Finland, France, GDR, Greece, Hungary, Iceland, Indonesia, Iran, Ireland, Israel, Jamaica, Japan, Kenya, Kuwait, Madagascar, Malta, Morocco, Nepal, New Zealand, the Netherlands, Nigeria, Norway, Philippines, Poland, Portugal, Romania, Senegal, Singapore, Sweden, Switzerland, Swaziland, Togo, the UK, Ukraine, the USA, Yugoslavia, DHL, UNA Conf.48 NR; CR Uganda, UNLG.

Table 2. Break-up of measures by the degree of industrialisation

	Low-industrialised countries (33)	Transition countries (12)	Industrialised countries (18)	All countries (63)
Without measures	24%	0%	0%	13%
Up to two forms of measures	45%	16%	0%	25%
Legal measures	55%	100%	100%	78%
Institutional measures	45%	83%	95%	62%
Planning measures	39%	75%	89%	62%
Research and monitoring	33%	75%	83%	60%
Technical measures	48%	58%	72%	59%
Information and education	24%	67%	50%	40%
Economic measures	9%	42%	61%	30%

at the national level. Firstly, environmentally significant changes to the legal framework, for example, laws, which defined the responsible actors and empowered them with the requisite powers.⁶⁷ Other measures of this type were laws that regulate, for example, the granting of licenses and the privatisation or nationalisation of environmentally significant goods. For example, authorities issued licenses for hunting animals (Botswana, Israel), forest areas (Brazil, DRC), and industrial sites (Denmark, Israel, Norway). Privatisation was not mentioned in any report; nationalisation of forests occurred in Nepal (1956) and Iran (1963); nationalisation of the land was introduced in Senegal (1964). Overall, however, measures concerning ownership were rarely reported, even in socialist countries. The second form, legal requirements, can further be divided into precepts and prohibitions. For instance, countries set emission standards for industries (Canada, Japan), motor vehicles (Denmark, Ireland, the USA), or required filters for the production process (Brazil, FRG, Norway, Portugal, Sweden, Ukraine, Yugoslavia). Prohibitions aimed at preventing actions harmful to the environment were widespread and mentioned in 71% of the reports. The most famous example was the prohibition of the pesticide DDT, which was banned by nineteen of the sixty-three countries between 1969 and 1971. Closely linked to the requirements and prohibitions was the third form of legal measures: the sanctioning of environmentally damaging behaviour, e.g. fines for polluting activities.

Not all countries surveyed implemented legal environmental standards. And the mere existence of environmental legislation says little about the level of detail and the design of the laws. Thus, while many countries had environmental laws, in most, these were fragmentary. Around 1972, according to the reports, only Japan, Sweden, the GDR, and Switzerland had comprehensive environmental laws. In all other cases, the laws covered only one specific sector of the environment such as the protection of wildlife, air preservation, soil conservation, nature and landscape protection, water and sea protection, town planning, forest conservation, noise, radiation protection, waste management, and pesticides. In terms of the implementation date, individual environmental laws were in some cases implemented before 1950. However, most of the laws mentioned in the country reports originated in the fifteen years before the UNCHE. The large-scale establishment of environmental legislation was thus a fairly recent development around 1970 and can be connected to some extent to the preparatory process of the UNCHE.

International agreements were an important supplement to legal measures at the national level. These agreements mainly regulated the use of transboundary waters, e.g. the International Convention for the Prevention of Pollution of the Sea by Oil, created in 1954. In 1972,

⁶⁷Cf. CR Belgium, Botswana, Senegal, Canada, France, Iceland, Iran, Israel, Japan, the UK, the USA, DHL, UNA Conf.48 NR.

twenty-nine countries studied here had ratified the convention.⁶⁸ Beyond existing conventions, sixteen countries called for further, improved agreements. For example, the London Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter was initiated by the UNCHE.

The second policy type – *institutional and administrative measures* – was another globally spread practice, as according to the reports, environmental authorities and institutions were established in thirty-nine countries (62%) (see [Supplementary material](#)).⁶⁹ Between 1962 and 1971, thirty-one countries established forty-six commissions, most of which were responsible for coordinating research and environmental activities, drawing up standards, and carrying out measurements and controls.⁷⁰ While fifteen of the forty-six commissions had a holistic scope, the others were sectoral and concerned with water, air, pesticides, nature protection, spatial planning, ocean pollution, wildlife, noise, and waste. In twenty countries, new ministerial offices were created between 1951 and 1972.⁷¹ Of these, nine industrialised countries established their holistic environment ministries between 1970 and 1972.⁷² Another form of institutional measures comprised the creation of state-protected areas (seven countries) and national parks (fourteen countries) to protect the landscape, flora, and fauna.⁷³ In conclusion, according to the reports, many states took institutional environmental protection measures around 1970, with holistic institution-building occurring mainly in industrialised countries. Besides these measures on a national scale, institution-building also took place at the international level, e.g. the Inter-Governmental Maritime Consultative Organisation. However, compared to the national institutions, the establishment of international institutions was less frequent and comprehensive in scope.

All reports attached great importance to the third policy type – *research, data collection, and monitoring*. However, only thirty countries mentioned their own research institutes.⁷⁴ The researched issues were wide-ranging: from bushfires (Australia) to remote sensing (Kenya) to improved wastewater treatment methods (Israel, Netherlands, Ukraine) and electric cars (Japan), to name a few. The extent of research activity varied among countries. While Iran listed sixty-five ongoing research projects in 1971, the Singaporean report cited only one study at the same time. Most research projects were sectoral, concerning a specific area such as water or soil, which contradicted the demand for environmental problems to be researched with a holistic approach. Gathering data was also important to implement monitoring and forecasting systems and define limit values. Twenty-four mostly industrialised and transition countries had installed

⁶⁸These include Australia, Belgium, Canada, Denmark, Egypt, Finland, FRG, France, Ghana, Greece, Iceland, Ireland, Israel, Japan, Kuwait, Madagascar, Morocco, the Netherlands, New Zealand, Nigeria, Norway, Philippines, Poland, Portugal, Singapore, Sweden, Switzerland, the UK, and the USA. Cf. International Convention for the Prevention of Pollution of the Sea by Oil, 1954, *Ecolex*. International Environmental Law, n.d., <<https://www.ecolex.org/details/treaty/international-convention-for-the-prevention-of-pollution-of-the-sea-by-oil-1954-as-amended-in-1962-and-1969-tre-000135/>>, accessed 22 July 2020.

⁶⁹CR of Australia, Belgium, Brazil, Canada, Central African Republic, Czechoslovakia, Denmark, DRC, Egypt, Finland, France, GDR, Greece, Indonesia, Iceland, Iran, Ireland, Israel, Jamaica, Japan, Kenya, Kuwait, Madagascar, Malta, the Netherlands, New Zealand, Norway, Philippines, Poland, Portugal, Senegal, Singapore, Swaziland, Sweden, Switzerland, Togo, the UK, Ukraine, DHL, UNA Conf.48 NR; CR Uganda, UNLG.

⁷⁰CR of Australia, Brazil, Belgium, Czechoslovakia, Denmark, Egypt, Finland, France, GDR, Greece, Iceland, Indonesia, Ireland, Israel, Jamaica, Kenya, Kuwait, Madagascar, Malta, New Zealand, the Netherlands, Philippines, Poland, Portugal, Singapore, Sweden, Swaziland, Switzerland, Togo, Ukraine, DHL, UNA Conf.48 NR.

⁷¹CR of Australia, Canada, Central African Republic, Czechoslovakia, DRC, France, GDR, Iran, Ireland, Japan, Kenya, Malta, Norway, Philippines, Swaziland, Sweden, Switzerland, the UK, the USA, DHL, UNA Conf.48 NR.

⁷²CR of Canada, Denmark, France, GDR, Japan, Switzerland, the UK, Ukraine, the USA, DHL, UNA Conf.48 NR. Norway founded an environmental ministry in 1972, shortly after the deadline for the country reports.

⁷³CR of Botswana, DRC, Cameroun, Chad, France, GDR, Iran, Ireland, Israel, Japan, Madagascar, Malta, Nepal, New Zealand, Poland, Portugal, Sweden, Swaziland, Switzerland, Yugoslavia, DHL, UNA Conf.48 NR; CR Uganda, UNLG.

⁷⁴The whole subsection rests on the CR of Australia, Belgium, Botswana, Czechoslovakia, Denmark, France, Egypt, FGR, GDR, Hungary, Iceland, Iran, Israel, Japan, Kenya, Kuwait, the Netherlands, Nigeria, Norway, Philippines, Poland, Portugal, Singapore, Sweden, Switzerland, the UK, Ukraine, the USA, DHL, UNA, Conf.48 NR; CR Uganda, UNLG.

monitoring systems, operated by government agencies and research institutions, that measured quality and pollution in the areas of air,⁷⁵ water,⁷⁶ residues of chemicals and pesticides in food,⁷⁷ radioactivity,⁷⁸ and marine pollution.⁷⁹ The lack of monitoring systems in all but four non-industrialised countries shows that the worldwide implementation of environmental measures, at the same time, was also strongly characterised by unequal conditions and opportunities.

Research and monitoring around 1972 were done mainly in a national framework. But for occasional studies within the framework of the ECE or the OECD as well as bilateral cooperation, the reports did not mention international research projects and monitoring systems.⁸⁰ Also lacking was a mention of the Man and the Biosphere project, an intergovernmental research project launched by UNESCO in November 1971,⁸¹ which suggests that conservation was not the priority concern of the authors of the reports. Twenty-three countries, however, emphasised the need for international knowledge transfer and research cooperation.⁸²

To the global scope of environmental policy points also the implementation of the fourth policy type: *Plans as environmental measures*. Recent research has shown that the 1960s and 1970s were filled with planning euphoria. It has been demonstrated how planning was a focus for economic policymaking not only in socialist but also in capitalist industrialised countries and played a significant role in the Cold War competition.⁸³ However, planning as a tool was also common in non-industrialised countries, where ‘development plans’ were used to coordinate economic development.⁸⁴ In total, the reports of thirty-nine countries highlighted implemented environmental planning measures.⁸⁵ Among the elements administered were holistic spatial plans, regional plans, development plans, and land use plans, as well as sectoral management plans. Environmental planning measures were common on all continents and in both capitalist and socialist countries. In the socialist countries of eastern Europe, environmental issues could easily be incorporated into the state planning machinery.⁸⁶ For example, the GDR report stated: ‘The arrangement of the natural environment is, like all other measures for the development of working and living conditions, a firm part of the state planning and management of the social processes of reproduction, which has its basis in the socialist ownership of the means of

⁷⁵CR of Belgium, Brazil, Ireland, Iran, Israel, Japan, Kuwait, New Zealand, Poland, Romania, Singapore, Sweden, DHL, UNA Conf.48 NR.

⁷⁶CR of Australia, Czechoslovakia, Denmark, GDR, Hungary, Iran, Israel, Kuwait, New Zealand, the Netherlands, Norway, Poland, Sweden DHL, UNA Conf.48 NR.

⁷⁷CR of Denmark, Iraq, Ireland, Israel, New Zealand, Poland, Portugal, Sweden, DHL, UNA Conf.48 NR; CR Uganda, UNLG.

⁷⁸CR of FGR and the USA, DHL, UNA Conf.48 NR.

⁷⁹CR of Sweden and Singapore, DHL, UNA Conf.48 NR.

⁸⁰See, for example, CR The Netherlands, DHL, UNA Conf.48 NR, 82.

⁸¹See Simone Schleper, *Planning for the Planet: Environmental Expertise and the International Union for Conservation of Nature and Natural Resources, 1960-1980* (New York: Berghahn Books, 2019).

⁸²CR of Australia, Belgium, Botswana, Czechoslovakia, Egypt, FGR, GDR, Iceland, Indonesia, India, Iran, Japan, Kenya, Kuwait, Madagascar, Malaysia, Nigeria, Pakistan, Philippines, Portugal, Romania, Ukraine, the USA, DHL, UNA Conf.48 NR.

⁸³See e.g. Elke Seefried, *Plan und Planung: Deutsch-deutsche Vorgriffe auf die Zukunft* (Berlin: De Gruyter Oldenbourg, 2018); Gabriele Metzler, *Konzeptionen Politischen Handelns von Adenauer Bis Brandt. Politische Planung in Der Pluralistischen Gesellschaft* (Paderborn: Ferdinand Schöningh, 2005); Maria Köhler-Baur and Heinz-Gerhard Haupt, ‘Aufbruch in die Zukunft: Die 1960er Jahre zwischen Planungseuphorie und kulturellem Wandel: DDR, ČSSR und Bundesrepublik Deutschland im Vergleich’, (Weilerswist: Velbrück Wissenschaft, 2004).

⁸⁴See Albert Waterston, *Development Planning: Lessons of Experience* (Baltimore: John Hopkins University Press, 1969).

⁸⁵The whole subsection rests on the country reports of Belgium, Brazil, Botswana, Cameroun, Canada, Central African Republic, Cyprus, Czechoslovakia, Denmark, FGR, France, GDR, Greece, Hungary, India, Indonesia, Iran, Ireland, Israel, Jamaica, Japan, Kenya, Malta, Nepal, New Zealand, the Netherlands, Norway, Portugal, Poland, Romania, Singapore Sudan, Switzerland, Sweden, Togo, the UK, Ukraine, the USA, DHL, UNA Conf.48 NR; CR Uganda, UNLG.

⁸⁶See e.g. Paul R. Josephson, ‘Projects of the Century’ in *Soviet History: Large-Scale Technologies from Lenin to Gorbachev*, *Technology and Culture* 36/3 (1995): 519–59.

production.⁸⁷ Thus, the GDR, Poland, Romania, Czechoslovakia, and Hungary integrated environmental aspects into their five-year plans in addition to economic and social ‘development’.

The overlap of environmental measures taken between capitalist and socialist states is also reflected in the implementation of the fifth measure: *technical measures*, mentioned by 57% of the capitalist countries, 86% of the East European ‘real-socialist’ countries, and 33% of other socialist countries.⁸⁸ These technical measures included actions and procedures that use technology and infrastructure to reduce, avoid or reverse environmental degradation. Most of the technical measures were reactive and merely addressed impacts such as the subsequent clean-up of beaches (Denmark) or the treatment of eutrophic lakes with aluminium sulphate and artificial air supply (Sweden). Some technical measures such as reforestation⁸⁹ or wastewater plants⁹⁰ represented a hybrid of reactive and proactive measures. There were, however, differences between the countries studied in terms of how widespread the technical installations were. Switzerland, for example, had 366 wastewater treatment plants around 1970, while the city of São Paulo in Brazil by then had only one, although both had a population of about six million.⁹¹ Other technical measures included the installation of air filters in factories to treat exhaust gases and reduce sulphur emissions (Czechoslovakia, Israel, Japan, Nepal, Netherland, Norway, Poland, Portugal, and Romania) or the improvement of recycling processes (Japan, the USA). Overall, the impact of the technical measures was small-scale, as the technologies were limited to selective problems. Nevertheless, the responsible actors pinned their hope on technical solutions. For example, the Finnish report stated: ‘Science and technology could serve the attempts to maintain a balance between the human and the natural economy.’⁹² Behind this view was the notion that there was no need to change behaviour or production methods because the problems would be solved by technology. Given the limited field of action, this hope can be seen as a lack of knowledge or wishful thinking.

The sixth policy type mentioned concerns *economic measures*. Existing research has mainly analysed the debate and implementation of economic measures of organisations with European and industrialised member states such as the OECD and the Council of Europe.⁹³ In the reports examined here, economic measures were mentioned in nineteen cases.⁹⁴ Most were industrialised, as the existing literature suggests, but not all: the reports of Brazil, Iran, and the Philippines show that low-industrialised countries debated economic measures too.

⁸⁷CR GDR, DHL, UNA Conf.48 NR, 14.

⁸⁸The whole subsection rests on the country reports of Brazil, Canada, Chad, Czechoslovakia, Denmark, DRC, Egypt, Finland, FGR, Hungary, Indonesia, Iran, Israel, Japan, Kuwait, Madagascar, Malta, Morocco, Nepal, the Netherlands, New Zealand, Norway, Philippines, Poland, Portugal, Romania, Senegal, Singapore, Sudan, Syria, Swaziland, Sweden, Switzerland, Togo, Ukraine, the USA, DHL, UNA Conf.48 NR.

⁸⁹CR of Chad, Cameroun, DRC, Indonesia, Iran, Madagascar, Malta, Morocco, Nepal, Philippines, Singapore, Sudan, Swaziland, Togo, Ukraine, DHL, UNA Conf.48 NR.

⁹⁰CR of Brazil, Czechoslovakia, FGR, Kuwait, New Zealand, The Netherlands, Sweden, Switzerland, Singapore, Ukraine, DHL, UNA Conf.48 NR.

⁹¹CR Brazil and Switzerland, DHL, UNA Conf.48 NR.

⁹²CR Finland, DHL, UNA Conf.48 NR, 47.

⁹³Jan-Henrik Meyer, ‘Making the Polluter Pay. How the European Communities Established Environmental Protection’, in *International Organizations and Environmental Protection. Conservation and Globalization in the Twentieth Century*, ed. Wolfram Kaiser and Jan-Henrik Meyer (New York, Oxford: Berghahn, 2017), 182–210; Jan-Henrik Meyer, ‘Who Should Pay for Pollution? The OECD, the European Communities and the Emergence of Environmental Policy in the Early 1970s’, *European Review of History* 24, no. 3 (2017): 377–98; Iris Borowy, ‘Negotiating Environment: The Making of the OECD Environment Committee and the Polluter Pays Principle, 1968–1972’, in *The OECD and the International Political Economy Since 1948*, ed. Matthieu Leimgruber and Matthias Schmelzer (Cham: Springer International Publishing, 2017), 311–34.

⁹⁴The subsection rests on the country reports of Brazil, Canada, Czechoslovakia, GDR, Greece, Hungary, Iran, Japan, Malta, New Zealand, the Netherlands, Philippines, Portugal, Romania, Sweden, Switzerland, Ukraine, the USA, Yugoslavia, DHL, UNA Conf.48 NR.

Economic measures included, first, financial incentives to encourage environmentally protective behaviour, for example tax breaks and subsidies for companies who created pollution control infrastructure, soil conservation measures, or similar measures. Second, governments used taxes and levies to control the behaviour of producers and consumers, allocate costs to polluters, or finance environmental measures, such as the taxation for imported oil in Canada for the marine fund. Fines, which have already been addressed with the legal measures, were the third form of financial instrument mentioned in the reports.

The main idea of the economic measures was to economise on pollution. The Swedish and Canadian reports argued strongly for market-based environmental measures because, as they postulated, environmental damage was not included in the price of products, which distorted prices and damaged the environment. The goal was to use economic instruments to correct the market failure by treating pollution clean-up costs as production costs and making polluters bear these costs. The application of the 'Polluter-Pays-Principle' was demanded mainly by actors in industrialised countries.⁹⁵ An example of this is given in the Finnish report: 'If the environmental costs can be transferred into the prices, this would probably lead to a decrease in the quantities demanded [. . .]. this would eradicate harmful production.'⁹⁶ What becomes clear from this conception is a great deal of optimism and confidence in the capitalist market economy.

The principle of internalising the external costs caused by environmentally harmful behaviour was also applied in countries with socialist planned economies. All eastern-European socialist states under research – except Poland and Yugoslavia – used financial instruments in their environmental policies.⁹⁷ For example, the East German report stated: 'Industrial prices must cover the socially necessary cost of production including expenditures for extended reproduction.'⁹⁸ Thus, around 1970, regardless of the economic system, the idea prevailed that environmental damage could be measured and controlled through prices.

The seventh policy type – *environmental information and education* – to promote awareness of environmental problems was implemented the most frequent on the European continent.⁹⁹ Governments launched public education and information campaigns through the press, television, films, posters, and radio. In Chad, for example, films and leaflets provided information on the correct use of pesticides. Besides public information and education campaigns, seven countries integrated environmental topics into school education curricula.¹⁰⁰ Environmental education was also institutionalised in annual public events, such as the 'European Nature Conservation Year'.¹⁰¹

In sum, the examination of the seven types of measures has shown that the implementation of international measures was in its infancy in 1972. Although fifty-five countries (87%) called for international measures, only legal and institutional measures existed at the international level. In terms of the quantity, subject areas, and binding nature of the national measures, comparatively few international measures existed in early 1972. Although the reports emphasised the importance of international cooperation, the focus often was on the country's own national well-being and interests. While the Stockholm Conference and the preparatory process inevitably promoted the implementation of environmental measures, especially in the legal and institutional field, it is unclear which measures would have been implemented independently of the UNCHE. Ultimately, the measures mentioned in the reports are a mixture of already existing ones, that

⁹⁵CR of Canada, Denmark, FGR, Finland, GDR, the Netherlands, Sweden, DHL, UNA Conf.48 NR.

⁹⁶CR Finland, DHL, UNA Conf.48 NR, 49.

⁹⁷CR of Czechoslovakia, GDR, Hungary, Romania, Ukraine, Yugoslavia, DHL, UNA Conf.48 NR.

⁹⁸CR, GDR, DHL, UNA Conf.48 NR, 32.

⁹⁹CR of Australia, Brazil, Cameroun, Central African Republic, Chad, Czechoslovakia, Finland, France, GDR, Greece, Hungary, Ireland, Israel, Japan, Kuwait, the Netherlands, Philippines, Poland, Romania, Senegal, Sweden, Singapore, Swaziland, Ukraine, DHL, UNA Conf.48 NR; CR Uganda, UNLG.

¹⁰⁰CR of Australia, Czechoslovakia, GDR, Israel, Japan, Poland, Sweden, DHL, UNA Conf.48 NR.

¹⁰¹CR of Finland, Ireland, the Netherlands, DHL UNA Conf.48 NR.

were used to show off to the international community, and measures that were produced by the intensified engagement with environmental issues in the framework of the UNCHE.

Relationship between economic growth, development, and the environment

It is telling that the title of the 1972 conference referred to the 'human environment'. Contemporaries around 1970 defined the environment as the basis of human life, which included both the natural and the social environment of humans. Environmental history scholars have shown that environment is a political term, anthropocentric, and historically variable.¹⁰² Warde, Robin, and Sörlin have demonstrated four dimensions comprising the concept of 'the environment' in the post-war era: the future, expertise, trust in numbers, and scale.¹⁰³ In the context of the UNCHE, however, one might add a fifth dimension: the connection between the environment and ideas on growth. The evolution of the growth paradigm as one of the dominant ideologies of the second half of the twentieth century has been researched elsewhere.¹⁰⁴ Scholars have shown how economic growth became 'the globally accepted yardstick of progress',¹⁰⁵ how it was contested,¹⁰⁶ and how by the 1960s, the concepts of economic growth and development were deeply intertwined.¹⁰⁷ The Stockholm Conference led to much debate about the relationship between the environment, economic growth, and economic development.¹⁰⁸ However, the positions contained in the national reports concerning this topic remain unclear so far. Therefore, this section will analyse the perceived relationship between the environment and economic growth respectively development. It is important to consider that due to country-specific economic and social conditions, 'growth' and 'development' did not necessarily mean the same for all these actors. In this respect, too, the reports and concepts used did not reflect an objective view. Nevertheless, during the preparatory process and at the conference, all actors discussed the topic precisely in these ostensibly universal terms of 'growth' and development and thus shaped the conception of the environment and environmental policy.

If we recapitulate the causes of environmental problems described in the reports, it is striking that all of them are related to growth phenomena: while a few listed problems had their origin in too little growth, most causes were related to economic, demographic, and spatial growth. Most reports, therefore, included explicitly or implicitly, debates on the links between growth and environmental degradation. Thirty-five countries took up the issue explicitly, which totals 68% of the

¹⁰²Sabine Höhler, *Spaceship Earth in the Environmental Age, 1960-1990* (London: Routledge, 2015), 12; Elena Aronova, 'Environmental Monitoring in the Making: From Surveying Nature's Resources to Monitoring Nature's Change', *Historical Social Research* 40/2 (2015): 222-45; Patrick Kupper, 'Die '1970er' Diagnose: Grundsätzliche Überlegungen zu einem Wendepunkt der Umweltgeschichte', *Archiv Für Sozialgeschichte* 43/1 (2003): 325-48.

¹⁰³Paul Warde, Libby Robin, and Sverker Sörlin, *The Environment: A History of the Idea* (Baltimore: Johns Hopkins University Press, 2018), 14-18.

¹⁰⁴Matthias Schmelzer, *The Hegemony of Growth: The OECD and the Making of the Economic Growth Paradigm* (Cambridge: University Press, 2016); Stephen Macekura, *Of Limits and Growth. The Rise of Global Sustainable Development in the Twentieth Century* (Cambridge: Cambridge University Press, 2015); Iris Borowy, 'Wirtschaftswachstum: Grundlage steter Wohlstandszunahme oder lebensbedrohliches Risiko?', *Traverse* 21/3 (2014): 115-24.

¹⁰⁵Matthias Schmelzer, 'The Growth Paradigm: History, Hegemony, and the Contested Making of Economic Growthmanship', in *Routledge Handbook of the History of Sustainability*, ed. Jeremy Caradonna (London: Routledge, 2018), 164-86.

¹⁰⁶Iris Borowy and Matthias Schmelzer, eds., *History of the Future of Economic Growth: Historical Roots of Current Debates on Sustainable Degrowth* (London: Routledge, 2017).

¹⁰⁷Stephen Macekura, 'Development and Economic Growth: An Intellectual History', in *History of the Future of Economic Growth*, ed. Iris Borowy and Matthias Schmelzer (London: Routledge, 2017), 110-28.

¹⁰⁸Stephen Macekura, 'Towards 'Sustainable' Development. The United Nations, INGOs and the Crafting of the World Conservation Strategy', in *International Organizations and Environmental Protection. Conservation and Globalization in the Twentieth Century*, ed. Wolfram Kaiser and Jan-Henrik Meyer (New York, Oxford: Berghahn, 2017), 245.

industrialised, 46% of the transition and 52% of the non-industrialised countries.¹⁰⁹ For example, the French report asked whether development aimed at increasing living standards was compatible with maintaining a harmonious environment. Can industrialisation, urbanisation, and the exploitation of natural resources be pursued at high growth rates without risking the degradation of nature and habitat?¹¹⁰ In response to these questions about the relationship between economic growth and environmental degradation, three positions can be identified.

The *first* position focused on the argument that environmental degradation damages economic ‘development’ and was found in seven reports, mainly from industrialised and transition countries.¹¹¹ According to the Swedish report, ‘failure or excessive delay in taking control measures may in many cases result in irreparable long-term damage to natural resources, thus jeopardizing continued economic development’.¹¹² This implies that the environment should be protected because otherwise, economic growth will be hindered.

The *second* position perceived the relationship between economic growth and environmental degradation as ambivalent. In total, sixteen countries argued for this perspective, both industrialised and non-industrialised, but mainly capitalist countries.¹¹³ Some reports emphasised that economic growth has negative effects on the environment and natural resources.¹¹⁴ For example, the Indian report established a fundamental link between the mode of production and the degradation of the environment: ‘The conditions which create pollution thus are so massively embedded in our system of industrial and agricultural production that any effort to make them conform to the demands of environment will involve serious economic dislocation’.¹¹⁵ Conversely, the premise that economic growth and negative impacts on natural resources were linked also meant that environmental protection was associated with economic losses. The reports adopting this position, therefore, argued that there were conflicting goals between economic growth and the environment. For example, in the reports of Canada, Madagascar, Nigeria, Norway and the USA it was argued that industrialisation and technological progress led to an increase in income respectively life expectancy, and opportunities, but simultaneously, these processes also caused environmental problems. Nine countries reported fundamental trade-offs between economic ‘development’ and the preservation of the environment.¹¹⁶ Economy and ecology were, therefore, difficult to reconcile, as the Canadian report stated: ‘The apparent conflict between the goals of growth and quality is heightened by the fact that projections of economic growth by industrial sector show very high growth rates in those industries that are now pollution-intensive [. . .]’.¹¹⁷

The *third* position propagated the non-contradictory relation between economy and ecology. In contrast to the second position, it did not assume conflicting goals, but rather a fundamental compatibility between economic growth and environmental protection. This position was, however, expressed only by three industrialised countries.¹¹⁸

The three positions made different basic assumptions and contradicted each other in some cases. The values represented in the reports were not always coherent; for example, there were reports such as the Indian and French that adopted more than one of these positions.

¹⁰⁹CR of Brazil, Botswana, Cameroon, Canada, DRC, Finland, France, GDR, Ghana, Greece, Iceland, India, Iran, Ireland, Jamaica, Japan, Kenya, Madagascar, Malaysia, Malta, Morocco, Netherlands, New Zealand, Nigeria, Norway, Poland, Romania, Senegal, Sudan, Sweden, Switzerland, the UK, USA, Yugoslavia, DHL, UNA Conf.48 NR; CR Uganda, UNLG.

¹¹⁰CR France, DHL, UNA Conf.48 NR, 6.

¹¹¹Cf. CR GDR, Greece, Iceland, Kenya, Sweden, Switzerland, USA, DHL, UNA Conf.48 NR.

¹¹²CR Sweden, DHL, UNA Conf.48 NR, 57.

¹¹³CR of Brazil, Canada, Finland, Greece, India, Ireland, Jamaica, Madagascar, Netherlands, New Zealand, Nigeria, Norway, Sweden, USA, Yugoslavia, UNA Conf.48 NR.; CR Uganda, UNLG.

¹¹⁴CR of Finland, Greece, India, Ireland, New Zealand, Sweden, DHL, UNA Conf.48 NR.

¹¹⁵CR India, DHL, UNA Conf.48 NR, 68.

¹¹⁶Cf. CR of Brazil, Canada, India, Jamaica, New Zealand, Netherlands, Sweden, Yugoslavia, DHL, UNA Conf.48 NR; CR Uganda, UNLG.

¹¹⁷CR Canada, DHL, UNA Conf.48 NR, 14.

¹¹⁸CR of GDR, France, Japan, DHL, UNA Conf.48 NR.

Common to most analysed reports, except for the third position, was that economic growth and environmental protection were placed in a conflicting relationship. In the Yugoslavian report, this was described as a 'permanent controversy existing between the economic progress and the state of the natural environment'.¹¹⁹ But how should this conflict be dealt with? The reports contained two approaches to address this question. The *first* position, found in nine reports, prioritised economic growth, implying that economic 'development' should not be jeopardised by environmental protection.¹²⁰ The explicit prioritisation of the economy occurred primarily in non-industrialised countries. The Congolese report stated: '[...] The protection of the physical and human environment must not, in underdeveloped countries, slow down the industrialization movement'.¹²¹ Non-industrialised countries pointed to the importance of economic 'development' in the fight against poverty, as illustrated by the Indian report:

In India, the imperatives of the situation are [...] to lift the masses from the state of poverty. This is sought to be achieved by restructuring the economy [...] and by increasing industrial and agricultural production. Spreading of new technology and industry are the crucial elements in economic growth. Certain environmental hazards are caused in this process of development.¹²²

The premise was that poverty can only be combated through economic growth, environmental menaces being regarded as unavoidable side effects.

The *second* position on how to deal with the conflict between economic growth and environmental preservation was the claim that economic growth should be pursued only with environmental protection as a condition. The US-American report stated that in the past, environmental pollution was tolerated 'as the disagreeable but acceptable price of progress' and only in recent years had it been recognised that 'the wastes heedlessly generated by a growing, urbanized, high-production, high-consumption society exceed nature's capacity for self-renewal'.¹²³ In total, fourteen reports postulated economic 'development' with consideration and minimisation of environmental impacts.¹²⁴ This included 32% (six out of nineteen) of industrialised, 0% of transition, and 24% (eight out of thirty-three) of non-industrialised countries, as well as 23% (eleven out of forty-eight) of capitalist and 20% (three out of fifteen) of socialist countries. To emphasise their claim, the authors of the reports used the metaphor of the balance between humans and the environment. 'It is widely recognized that the quality of life in future depends on establishing a sensitive balance between population and resources',¹²⁵ declared the Indian report. And further: 'The environmental problems in India have thus to be viewed in the context of a compromise between development needs and hazards'.¹²⁶ The Moroccan report stated: 'It is a question of achieving the right balance between development projects [...] and projects aimed at safeguarding the environment'.¹²⁷ It becomes clear that growth and environmental protection were compatible in this view. What remained unclear was how this propagated equilibrium should be implemented. Only the Canadian report pointed out that the compatibility was difficult to achieve: 'In the past, lack of knowledge permitted the pursuit of economic growth without regard to the limited assimilative capacity of local and regional ecosystems. In the future, the goals of economic growth and environmental quality must

¹¹⁹CR Yugoslavia, DHL, UNA Conf.48 NR, 20.

¹²⁰CR of Brazil, Cameroun, DRC, Ghana, India, Jamaica, Malaysia, Romania and Sudan, DHL, UNA Conf.48 NR.

¹²¹CR DRC, DHL, UNA Conf.48 NR, 22. Translation from French is mine.

¹²²CR India, DHL, UNA Conf.48 NR, 67.

¹²³CR USA, DHL, UNA Conf.48 NR, 13.

¹²⁴CR of Botswana, Canada, DRC, India, Iran, Madagascar, Malta, Morocco, New Zealand, the Netherlands, Poland, Senegal, UK and USA, DHL, UNA Conf.48 NR.

¹²⁵CR India, DHL, UNA Conf.48 NR, 91.

¹²⁶CR India, DHL, UNA Conf.48 NR, 68.

¹²⁷CR Morocco, DHL, UNA Conf.48 NR, 4.

be reconciled. [...] This will not be easy'.¹²⁸ Ultimately, the Canadian report also included the assumption that growth and environmental protection were compatible.

The preceding analysis shows that many country reports contained profound evaluations of the connection between economy and ecology. Although the reports identified growth processes as the cause of the problem, the mode of production was not questioned and the growth paradigm remained untouched. In contrast to the study *The Limits to Growth*,¹²⁹ which was published shortly after the country reports and questioned the belief in progress, the attitude in the reports was instead, 'The goal [...] is not [...] to abandon growth but to redirect it'.¹³⁰ Overall, the idea of the Founex report that environmental protection and economic 'development' are compatible was widely incorporated in the reports. The developing countries' demand that rich countries should not hinder their development under the guise of environmental protection was therefore widely taken up as an argument in the reports, not only by the developing countries but also by the industrialised ones, using it for their own interests.

The widely underlying premise of growth as a necessity meant also that the identified causes of environmental problems were not questioned. Though some of the reports called for ecological aspects to be included in economic considerations, the studied reports made it clear that within the growth paradigm, ecology was subordinated to economics. Therefore, the analysis of the reports does not support the thesis of previous research that ecological considerations gained independent argumentative power.¹³¹ Though ecological arguments surfaced in environmental discourse around 1960, the analysis of the reports made it clear that within the growth paradigm, economic logics remained the most powerful category for evaluating the environment.

Conclusion

This study is a source-based investigation that sheds light on the perception of environmental problems as well as national and international environmental policy measures around 1970, in the preparatory phase of the UNCHE. Based on an international comparative study of sixty-three country reports, the article adds to the existing research by arguing for two main theses. Firstly, 'the environment' emerged as a field of knowledge not only in capitalist industrial societies but in socialist and non-industrial societies as well. The global approach adopted shows that the collection of environmental knowledge around 1970 was a global process and countries worldwide were involved in this process. Although the analysis shows differences regarding the understanding of the environment and a variation in depth and quality of the country reports, it became clear that environmental knowledge and governance by the 1970s had a global scope – across opposed economic systems and state of economic 'development'. The emergence of environmental knowledge and policies - part of the 'ecological revolution' - was therefore far from being an 'Western' event, as argued by Joachim Radkau.¹³² Furthermore, as discussed in section two, the analysis refutes a common view held in research on future predictions: not only industrialised nations but also non-industrialised ones engaged in trend extrapolation and dealt with connections between environmental problems and the future.¹³³ In sum, the sources studied not only rebut the common notion of a supposedly Northern-driven discourse on environmental problems but also reveal a widespread awareness of exactly these problems and inequalities around 1970. The article is thus if nothing else, a plea that historians should study and compare sources

¹²⁸CR Canada, DHL, UNA Conf.48 NR, 11.

¹²⁹Donella H. Meadows et al., *The Limits to Growth: A Report for the Club of Rome's Project on the Predicament of Mankind* (New York: Universe Books, 1972).

¹³⁰CR USA, DHL, UNA Conf.48 NR, 6.

¹³¹Cf. Hünemörder, *Die Frühgeschichte der globalen Umweltkrise*, 16.

¹³²Radkau, *Die Ära der Ökologie*, 137.

¹³³Cf. Hünemörder, *Frühgeschichte der globalen Umweltkrise*; Lucian Hölscher, *Die Entdeckung der Zukunft*, 2nd edition (Göttingen: Wallstein, 2016), 307–8.

coming from different regions and move back and forth between local, regional, and global perspectives, to gain a more comprehensive understanding of historical processes.

Secondly, the article demonstrates a large overlap of environmental policies taken across geographical and ideological lines. Overall, the reports attest to a broad knowledge of environmental problems and an understanding of ecological interrelationships around 1970. The environmental measures implemented varied in focus and frequency across countries. Although the reports called for holistic measures, most measures were fragmented and sectoral. The comparison of the country reports further shows that the degree of industrialisation was the decisive factor both in the perceived nature of the environmental problems and in the implemented environmental policies. Geographical location and the organisation of the economic and political system, on the other hand, offer no explanatory potential for differences and similarities. While some of the topics and problem areas raised in the reports may have been similar because of what the preparatory committee asked for, the large overlapping across geographical and ideological lines of policy measures is striking and cannot be attributed solely to the structure of the reports. For example, economic instruments were discussed in both socialist and capitalist country reports. Additionally, the differences between the reports, for example, in design, scope, and – if we consider the interviews in the Kenyan report – the methods, also indicate that the preparatory committee's instructions did not predefine the results, but that the countries handled the task of collecting environmental knowledge variously and independently.

Overall, the preparatory process of the UNCHE had profound impacts on environmental governance: it led not only to a global elicitation of environmental knowledge but also the formation of new environmental ministries and legislation. The country reports represented the first systematic cataloguing of environmental problems and measures in many countries. Therefore, on the one hand, environmental governance emerged as a global field of knowledge in the framework of the UNCHE and on the other, the environment was transformed into a global policy field *inter alia* through the preparatory process and the country reports. The inquiry thus also points to the importance of international organisations and gatherings for the emergence of environmental knowledge and policies. It shows how international conferences matter not only in proceedings and decisions but also by prompting participants to take stock in advance, highlighting the need for scholars to give more attention to the preparatory phase of international conferences in general.

Supplementary material. To view supplementary material for this article, please visit <https://doi.org/10.1017/S1740022823000013>

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