
International Attitudes Towards Environment and Development

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Conventional wisdom holds that concern for the environment is limited to residents of the wealthy industrialized nations of the Northern hemisphere, as those who live in the poorer, Southern nations are assumed to be too preoccupied with economic survival to be able to worry about environmental quality.¹ This may have been true back in 1972, when the UN Conference on the Human Environment was held in Stockholm, but it seems implausible in the current era of world-wide activism on behalf of the environment.² Yet, it may be that residents of the industrialized nations remain *more* concerned about environmental problems than do those of the less economically developed nations.

Conventional wisdom also holds that the perceptions of the roots of the global environmental *problematique*, and of how it ought to be mitigated, differ dramatically between residents of the economically advanced nations and those of the poorer nations.³ These differences were certainly apparent at the 1992 UN Conference on Environment and Development in Rio de Janeiro, where the governments of poorer nations emphasized the importance of 'development' and those of the richer nations that of 'environment' (to the neglect of development), and the means of achieving 'sustainable development' remained ambiguous.⁴ Did this division at the 'Earth Summit' reflect a chasm in perceptions of environmental problems and how they ought to be solved between those who live in rich and those who live in poorer nations?

To examine possible differences in public perceptions of environmental problems the George H. Gallup International Institute conducted an unprecedented international environmental opinion survey in early 1992. Gallup's *Health of the Planet* survey included twenty-four nations covering a wide range of economic levels and geographic regions. Results from the survey allow for an examination of both key elements of conventional wisdom: that concern over environmental quality is much higher in the richer nations, and that views of the causes and solutions of environmental problems differ dramatically between residents of the rich and poor nations.

After describing the nature of the Gallup survey in more detail, this chapter will examine public perceptions of the seriousness of environmental problems—at the local, natio-

nal, and world levels—across the nations, paying attention to possible differences between industrialized and non-industrialized nations. It will then focus on several issues related to the linkage between environment and development: the relative responsibility of rich and poor nations for the world's environmental problems; the major contributor to environmental problems within the poorer, developing nations; and the actions that the industrialized nations should take in order to help developing nations protect their environments. Comparing responses to these items will provide insight into public attitudes toward sustainable development and how it might best be achieved. Finally, responses to two items dealing with support for an international environmental agency will shed light on public endorsement of enhanced international enforcement of environmental protection, and how it varies across nations.

Information on Survey Methodology

Timed to coincide with preparations for the 1992 Earth Summit in Rio de Janeiro, Gallup's *Health of the Planet* survey was co-ordinated by the George H. Gallup International Institute and conducted by the world-wide network of Gallup affiliates (who donated over a million dollars in data collection-and-tabulation costs). The selection of countries was dependent upon the availability of a Gallup affiliate (or willing partner) and funding,⁵ and two-dozen nations were included. While poorer, less-developed nations are consequently under-represented, the intent was *not* to conduct a world-wide survey whose results could be generalized to the entire world. Rather, our goal was to survey citizens in a wide range of nations, in terms of both geographic location and level of economic development, and thereby to go beyond existing cross-national environmental surveys that have been limited primarily to Europe or North America.⁶ We were reasonably successful in this goal, covering a greater number and wider range of nations than have ever been included in an environmental opinion survey.⁷ The result is that we can provide the first test of conventional wisdom concerning North-South, rich-poor variation in public perceptions of environmental issues.

Table 1. Information on nations included in Gallup's 'Health of the Planet' survey

Region/Nation	Sample size	Survey organization
<i>North America</i>		
Canada	1,011	Gallup Canada, Toronto
United States	1,032	The Gallup Organization, Princeton, NJ
<i>Latin America</i>		
Brazil	1,414	Instituto Gallup De Opinião Publica, São Paulo
Chile	1,000	Gallup Chile SA, Santiago
Mexico	1,502	IMOP SA de CV, Gallup Mexico, Mexico, DF
Uruguay	800	Gallup Uruguay, Montevideo
<i>East Asia</i>		
Japan	1,434	Nippon Research Center, Ltd., Tokyo
Korea (Rep.)	1,500	Korea Survey (Gallup Polls) Ltd., Seoul
Philippines	1,000	Asia Research Organization, Inc., Manila
<i>Other Asia</i>		
India	4,984	Indian Institute of Public Opinion, New Delhi
Turkey	1,000	Piar Marketing Research Co., Ltd., Istanbul
<i>Eastern Europe</i>		
Hungary	1,000	Gallup Hungary, Ltd., Budapest
Poland	989	Demoskop, Warsaw*
Russia	964	Institute of Sociology of the Russian Academy of Sciences, Moscow
<i>Scandinavia</i>		
Denmark	1,019	Gallup—Denmark, Copenhagen
Finland	770	Suomen Gallup Oy, Helsinki
Norway	991	Norsk Gallup Institutt A/S, Oslo
<i>Other Europe</i>		
Germany**	1,048	EMNID—Institut GmbH & Co., Bielefeld
Great Britain	1,105	Social Surveys (Gallup Poll), Ltd., London
Ireland	928	Irish Marketing Surveys, Ltd., Dublin
Netherlands	1,011	NIPO, Amsterdam
Portugal	1,000	NORMA, Lisbon
Switzerland	1,011	ISOPUBLIC, Zurich
<i>Africa</i>		
Nigeria	1,195	Research and Marketing Services, Ltd., Lagos

Note: * Not a Gallup affiliate. ** Does not include the former East Germany.

Source: Riley E. Dunlap, George H. Gallup, Jr., and Alec M. Gallup (1993), *Health of the Planet* (George H. Gallup International Institute, Princeton, NJ).

Table 1 shows the regional distribution of the twenty-four nations that were included in the *Health of the Planet* survey. European and North American nations are clearly over-represented, while Asian and especially African nations are under-represented. None the less, as will be seen later, while eleven of the nations are 'high income' countries, the other thirteen include a wide range of 'low' to 'medium' income nations. Thus, there is sufficient variation to allow for meaningful comparisons between citizens of wealthy and poor nations in terms of views on environmental and development issues.

The survey covered a wide range of environmental issues that appear to be of relevance to all types of nations, drawing upon extensive reviews of existing studies.⁸ The affiliates were responsible for translating the questionnaire into the appropriate language(s) for their nations, and then the Gallup International Institute had them 'back-translated' into English to ensure comparability. The surveys were conducted via

face-to-face, in-home interviews with nationally representative samples in all nations but India. In India rural areas were under-represented, and thus caution must be used in generalizing the results to the nation as a whole. The sample sizes are shown in Table 1, most from about 1,000 to 1,500. Samples in this size range should be accurate within approximately plus-or-minus 3 percentage points of the national populations.

Perceptions of the Seriousness of Environmental Problems

National Environmental Problems

We focus first on perceptions of the seriousness of environmental problems, measured in a number of complementary ways. Respondents were first asked two questions about a wide range of problems facing their na-

tion,⁹ and then the survey turned specifically to environmental problems by asking the question shown in Table 2. After defining what we meant by 'environment', we asked respondents to rate the quality of the environment in their nation, local community, and the world as a whole. Table 2 shows the percentages rating these environments negatively, as either 'fairly bad' or 'very bad', with the countries rank-ordered in terms of the percentage rating the local community environment negatively.¹⁰

Overall, respondents tend to see their nation's environment, and especially that of the world as a whole, as in poor shape, as majorities in nine countries rate their nation's environment negatively while majorities in twenty-one countries rate the world environment negatively. It is the pattern of ratings given to the three geographical levels that is particularly interesting, however. Consistent with prior studies, respondents are more likely to rate their nation's

Table 2. Ratings of environmental quality at local, national and world levels* (%)

	Rating of very/fairly bad		
	In community	In nation	In world
Poland	71	88	73
Russia	69	88	66
Korea (Rep.)	57	74	66
Hungary	48	72	71
India	44	52	42
Turkey	44	42	45
Chile	41	68	88
Brazil	41	49	64
Nigeria	34	38	24
Mexico	31	56	70
Japan	31	52	73
Portugal	30	39	75
Philippines	28	52	58
United States	28	45	66
Uruguay	28	37	74
Great Britain	27	36	76
Netherlands	24	45	84
Germany (West)	22	42	86
Switzerland	20	27	86
Canada	18	26	79
Finland	13	13	73
Denmark	12	18	92
Ireland	10	14	73
Norway	10	12	88

Note: *Respondents were asked: 'Now let's turn our discussion to the environment. When we say environment, we mean your surroundings—both the natural environment—the air, water, land and plants and animals—as well as building, streets and the like. Overall, how would you rate the quality of the environment in our nation—very good, fairly good, fairly bad, or very bad? In your local community? In the world as a whole?'

Source: Riley E. Dunlap, George H. Gallup, Jr., and Alec M. Gallup (1993), *Health of the Planet* (George H. Gallup International Institute, Princeton, NJ).

environment negatively than they are their local community's environment (with Turkey and Finland the only exceptions). They are also generally more likely to see the world's environment as worse than their nation's, with six exceptions. In the three East European nations plus Nigeria, India, and the increasingly industrialized Republic of Korea, a higher proportion of respondents give their nation's environment a poor rating than give the world's environment such a rating. In the remainder of the countries (with the exception of Turkey and Finland, as noted above), there is a clear pattern in which the more distant the environment being rated, the more negatively it is viewed.

It is also apparent that the local community environment is more likely to be rated poorly in the East European and Southern hemisphere nations, and that it is generally viewed positively in the Scandinavian countries. There is also a tendency for the world environment to be rated more negatively in highly developed nations, particularly Scandinavian, and less so in the poorer nations (especially Nigeria, India, Turkey, and the Philippines)—but the differences are less striking than in the case of the local environment.

In short, residents of the less economically developed nations tend to rate their local environments much more negatively, and their national environments somewhat more negatively, than do their counterparts in the highly developed nations. Conversely, residents of the richer nations tend to see the world environment as far worse than either their local or national environments. Thus, it seems most accurate to conclude that the geographical foci of concern vary across nations far more than any overall tendency to view environmental quality negatively. People in both rich and poor countries are likely to see the quality of the environment as in poor shape, but those in the former are especially likely to see the world environment that way whereas those in the latter are more likely to see their local or national environments that way.

To get a better sense of the types of environmental problems that concerned our respondents at the various geographical levels we asked additional questions for each level. The prior question was followed by an open-ended question that asked respondents to name 'the most important environmental problem facing our nation', and responses were coded into several broad categories suggested by prior studies. Interestingly, the international responses to this open-ended question are similar to those obtained in earlier studies in the United States.

First, respondents are most likely to volunteer some form of 'pollution', especially air and water pollution, as their nation's most important environmental problem.¹¹ In fact, in fifteen countries air pollution is the most frequently mentioned problem, and in every country except Portugal it is among the top three. Water quality is mentioned most frequently in four

nations, second most in eight, and third most in another seven. The category of 'pollution' in general also turns up among the top three mentions in eleven countries.

Some interesting departures from the norm are 'loss of natural resources', cited most often in Brazil and the Philippines—where it is indeed a critical problem—and third most often in Germany, Portugal, and Switzerland. In addition, 'waste disposal' is emerging as a major concern, showing up first in Uruguay, second in four nations, and third in another five. 'Toxic waste' as a particular pollution/disposal problem shows up among the top three mentions in only two nations, Russia and Hungary.

Most importantly, there do not appear to be major differences between the developed and less-developed nations in terms of public perceptions of the nation's most serious types of environmental problems. Air and water pollution are clearly

seen as major national problems around the world.

Local Community Environmental Problems

To examine perceptions of environmental problems at the local, community level we took a differing approach. Because of the vast range of specific problems that might possibly exist in respondents' communities, and the impossibility of creating meaningful codes for all of them, we constructed a short list of fairly broad types of potential problems applicable to virtually all communities and asked respondents to rate the seriousness of each one. Table 3 shows the percentage who rated each type of problem as 'very serious' in their communities.

In some countries, particularly the poorer ones, large minorities and even majorities rate most local environmental problems as very serious. Especially notable in this regard are

Table 3. Perceived seriousness of environmental problems in local community* (%)

	% saying 'very serious'					
	Poor water	Poor air	Contaminated soil	Inadequate sewage	Too many people	Too much noise
<i>North America</i>						
Canada	17	17	11	21	7	5
United States	22	18	12	17	11	7
<i>Latin America</i>						
Brazil	43	30	24	49	21	24
Chile	13	18	17	33	9	17
Mexico	25	21	24	39	23	23
Uruguay	7	9	9	25	7	10
<i>East Asia</i>						
Japan	14	12	9	15	5	8
Korea (Rep.)	35	32	14	40	18	28
Philippines	23	12	11	30	19	13
<i>Other Asia</i>						
India	49	53	19	46	45	50
Turkey	42	37	27	62	38	29
<i>Eastern Europe</i>						
Hungary	15	19	12	17	5	9
Poland	62	61	50	55	10	24
Russia	39	39	28	40	10	12
<i>Scandinavia</i>						
Denmark	5	4	4	3	1	3
Finland	17	19	14	12	4	4
Norway	13	13	10	11	8	9
<i>Other Europe</i>						
Germany (West)	15	21	15	14	11	16
Great Britain	23	21	14	21	14	17
Ireland	16	9	8	13	6	5
Netherlands	1	5	5	2	5	4
Portugal	36	37	29	32	17	24
Switzerland	7	15	5	8	9	16
<i>Africa</i>						
Nigeria	65	22	22	52	30	26

Note: *Respondents were asked: 'Here is a list of environmental problems facing many communities. Please tell me how serious you consider each one to be here in your community—very serious, somewhat serious, not very serious, or not serious at all? a. Poor water quality; b. Poor air quality; c. Contaminated soil; d. Inadequate sewage, sanitation and garbage disposal; e. Too many people, overcrowding; f. Too much noise.'

Source: Riley E. Dunlap, George H. Gallup, Jr., and Alec M. Gallup (1993), *Health of the Planet* (George H. Gallup International Institute, Princeton, NJ).

Table 4. Perceived seriousness of environmental problems in the world* (%)

	% saying 'very serious'						
	Air pollution	Water pollution	Contaminated soil	Loss of species	Loss of rain-forest	Global warming	Loss of ozone
<i>North America</i>							
Canada	61	77	57	58	71	58	70
United States	60	71	54	49	63	47	56
<i>Latin America</i>							
Brazil	70	69	56	73	77	71	74
Chile	73	77	64	72	71	59	78
Mexico	77	78	77	81	80	62	71
Uruguay	78	77	68	76	80	69	84
<i>East Asia</i>							
Japan	43	43	29	37	47	47	55
Korea (Rep.)	55	49	27	33	24	47	54
Philippines	49	46	42	44	65	40	37
<i>Other Asia</i>							
India	65	50	35	48	54	36	40
Turkey	72	61	54	61	63	45	59
<i>Eastern Europe</i>							
Hungary	54	53	42	47	47	33	47
Poland	77	80	73	76	73	59	66
Russia	71	74	63	61	65	40	59
<i>Scandinavia</i>							
Denmark	61	72	42	62	84	55	65
Finland	58	67	52	48	71	34	60
Norway	69	71	55	61	80	66	70
<i>Other Europe</i>							
Germany (West)	61	70	55	69	80	73	78
Great Britain	52	72	50	60	79	62	66
Ireland	63	74	52	55	67	63	68
Netherlands	30	43	36	45	70	36	47
Portugal	78	81	71	68	82	72	79
Switzerland	62	69	46	61	78	62	68
<i>Africa</i>							
Nigeria	43	44	47	34	31	26	27

Note: *Respondents were asked: 'Now lets talk about the world as a whole. Here is a list of environmental issues that may be affecting the world as a whole. As I read each one, please tell me how serious a problem you personally believe it to be in the world—very serious, somewhat serious, not very serious, or not serious at all—or you don't know enough about it to judge?' a. Air pollution and smog; b. Pollution of rivers, lakes, and oceans; c. Soil erosion, polluted land, and loss of farmland; d. Loss of animal and plant species; e. Loss of the rain forests and jungles; f. Global warming or the "greenhouse" effect; g. Loss of ozone in the earth's atmosphere.'

Source: Riley E. Dunlap, George H. Gallup, Jr., and Alec M. Gallup (1993), *Health of the Planet* (George H. Gallup International Institute, Princeton, NJ).

India, Poland, Turkey, Russia, and Nigeria. By contrast, in others—especially Denmark and the Netherlands—few respondents see local environmental problems as very serious. Overall, respondents in the wealthier nations are less likely to rate local environmental problems as very serious.

There is considerable variation in the perceived seriousness of specific types of local environmental problems across nations. Poor water quality is seen as especially serious in Nigeria, Poland, India, Brazil, Turkey, Russia, Portugal, and Korea, and poor air quality as such in Poland, India, Russia, Turkey, and Portugal. Poland also reports high levels of soil contamination. In the case of inadequate sewage, not surprisingly it is citizens in the less developed and the Eastern European nations—Turkey, Poland, Nigeria, Brazil, India,

Korea, Russia, and Mexico—who view it as a very serious community problem. 'Too many people/overcrowding' is viewed as especially serious in India and Turkey, while citizens of India are also likely to view the related problem of noise as very serious.

In sum, sewage treatment, water quality, and air quality are most likely to be viewed as very serious local community problems, with contaminated soil, overcrowding, and noise less so, across all of the nations surveyed. Not surprisingly, all six problems are rated as more serious—often much more so—by residents of the less economically developed nations than they are by those who live in the wealthier nations.

World Environmental Problems

Having focused on national and community environmental problems, we then shifted our focus to problems at the world level. A critical change since the 1972 Stockholm Conference has been the emergence of truly 'global' environmental problems, and we examined perceptions of several crucial ones. In addition to the world-wide problems of air, water, and soil degradation, we focused on loss of plant and animal species, loss of rain-forests, global warming, and ozone depletion. We measured respondents' perceptions of these world-wide problems by asking them to rate the seriousness of each problem shown in Table 4.

Compared to local-level problems, there is greater consensus across countries when it comes to assessing the seriousness of world problems. This is not surprising, as perceptions of local conditions are likely to be heavily affected by the conditions themselves; in contrast, views of global conditions are influenced more by information (often via the media) than by first-hand observations. Further, impacts of truly global problems are expected to be felt world-wide (albeit often with differing intensity in different regions).

In most countries, nearly all of the world problems examined are rated as 'very serious' by majorities of the respondents, although in Japan, Korea, the Philippines, Hungary, Nigeria, and the Netherlands most of the world problems are given that rating by 'only' one-third to one-half of the citizens. Countries whose residents are especially likely to see these seven world problems as very serious include Chile, Brazil, Germany, Portugal, Poland, Uruguay, and Mexico. Thus, it is apparent that citizen concern for world-wide environmental problems is distributed fairly evenly across the nations (although citizens in Nigeria, India, and the Philippines tend to rate most of them less seriously than is the case for other nations). Whereas residents of the poorer nations are much more concerned about local environmental problems than are their counterparts in the wealthy nations, the converse does not hold for the world level: those in the wealthy nations are not substantially more likely than those in the poorer nations to see world problems as very serious.

Turning to the specific global problems examined, water pollution and loss of rain-forests are the most likely to be seen as very serious, followed by ozone depletion, air pollution, loss of species, global warming, and contaminated soil. It is notable that in every country except the Philippines, loss of ozone is seen as more serious than is the related problem of global warming. More importantly, in eighteen of the twenty-four countries, loss of plant and animal species is more likely to be rated 'very serious' than is contaminated soil, and in fifteen countries more so than is global warming (with which it is interrelated). This suggests that, despite the growing recognition of the threat to human health and welfare posed by environmental degradation, concern for environmental

quality encompasses far more than a narrow concern with human welfare.

Summary

The foregoing results on perceptions of environmental problems reveal that concern about the state of the environment is certainly not limited primarily to residents of the wealthy, industrialized nations of the northern hemisphere as was once widely believed. Citizens in the less economically developed nations are much more likely to see their local environments as degraded, somewhat more likely to see their national environments as in poor shape, but *not* all that much less likely to see world environmental problems as very serious than are citizens in the wealthier nations. While the specific problems that are of most concern vary, and people in poorer nations tend to be especially concerned about their local environments, concern about environmental quality is distributed across a wide range of nations and is not the province of the wealthy, industrialized nations. Public concern for the state of the environment seems to have become a world-wide phenomenon, as suggested by widespread participation in the 1992 Earth Summit in Rio de Janeiro.¹²

Attitudes Towards Environment and Development

A major shift that has occurred since the 1972 Stockholm Conference has been an explicit attempt to view international development and environmental protection as two sides of the same coin, rather than as separate issues. In fact, the official name of the Earth Summit, the UN Conference on Environment *and* Development, signifies this trend. Stimulated by the work of the Brundtland Commission, set forth in *Our Common Future*,¹³ the goal of 'sustainable development' has been put forth as a means of integrating economic development and environmental protection—particularly within the less economically developed nations.

None the less, the nature of sustainable development, and the means of achieving it, remain ambiguous and the subject of considerable controversy.¹⁴ This was quite apparent at the Earth Summit, where policy debates revealed a huge chasm between governments of the rich and poor nations in terms of their views of the relationship between international economic development and the protection of environmental quality.¹⁵ Although the *Health of the Planet* survey was designed well before the Earth Summit, an effort was made to examine citizens' views of a wide range of issues related to the environment and development linkage.

Responsibility for World Environmental Problems

An especially controversial topic has been the relative contributions of the rich and poor nations to the world's

environmental problems. In particular, spokespersons for the less developed nations point to the disproportionate levels of resource consumption and pollution production in the richer countries, while spokespersons for the latter have suggested that poorer nations contribute greatly to environmental problems—via high population growth, weak environmental regulations, and outmoded technologies. Do citizens around the world hold sharply contrasting views on the issue of relative responsibility for world environmental problems? To examine this issue we asked respondents, ‘Which do you think is more responsible for today’s environmental problems in the world—industrialized countries, developing countries, or do you think they are both equally responsible?’ The results are shown in Table 5, where the countries are arranged by economic level (as measured by per capita GNP).¹⁶

Overall, the results provide little evidence to suggest that

Table 5. Responsibility for the world's environmental problems* (%)

	% who think each is responsible		
	Industrialized nations	Developing nations	Both equally
<i>Low income</i>			
Nigeria	32	18	37
India	31	12	46
Philippines	30	14	54
Turkey	40	12	39
Poland	45	7	39
Chile	37	10	50
<i>Middle income</i>			
Mexico	37	6	50
Uruguay	38	5	49
Brazil	32	8	56
Hungary	28	9	56
Russia	30	5	57
Portugal	37	3	52
Korea (Rep.)	33	37	23
<i>High income</i>			
Ireland	40	4	46
Great Britain	37	6	50
Netherlands	53	2	40
Canada	37	3	57
United States	29	4	61
Denmark	64	5	27
Germany (West)	54	4	37
Norway	65	3	26
Japan	41	11	28
Finland	58	5	33
Switzerland	46	5	46

Note: *Respondents were asked: ‘Now, thinking about the world, which do you think is more responsible for today’s environmental problems in the world—industrialized countries, developing countries, or do you think they are both equally responsible?’

Source: Riley E. Dunlap, George H. Gallup, Jr., and Alec M. Gallup (1993), *Health of the Planet* (George H. Gallup International Institute, Princeton, NJ).

the citizens of rich and poor nations are sharply divided on the issue of responsibility for world environmental problems. In ten countries, covering all income levels, majorities choose ‘both equally responsible’, and in five more pluralities do so, making this the most popular choice in fifteen nations. In eight countries citizens are most likely to blame industrialized nations. However, six of these (including the only five where majorities take this position: the Netherlands, Germany, Denmark, Finland, and Norway) are themselves industrialized nations. Ironically, the sole nation in which a plurality places the blame on developing nations is Korea, itself one of the most rapidly developing countries in the world. The other nations in which at least 10 per cent of respondents place the blame on developing nations include the low-income countries of Nigeria, India, the Philippines, Chile, and Turkey, as well as Japan.

Thus, citizens of the rich and poor nations do not seem as polarized as widely assumed when it comes to assigning responsibility for world environmental problems. Residents of the highly industrialized nations tend to recognize their greater contribution to these problems, whereas residents of the less developed countries are likely to acknowledge a share of the blame.

Contributors to Environmental Problems in Developing Nations

A related issue, which has also been the object of controversy, is the source of environmental degradation *within* the less developed nations themselves. Some see these problems as stemming mainly from forces outside these countries, especially the exploitation of their resources by multinational companies for the purpose of supplying the high-consumption life-styles of the industrialized nations. Others point to conditions within the less developed nations, particularly their rapidly growing populations, as the primary contributor to their environmental problems. We examined perceptions of this issue by asking: ‘How much do you think each of the following contributes to environmental problems in developing countries: Consumption of the world’s resources by industrialized countries? Multinational companies operating in developing countries? Overpopulation in these developing countries?’ The percentages responding ‘a great deal’ for each are shown in Table 6.

Overall, there is a modest tendency for more blame for developing nations’ environmental problems to be placed on their ‘population problem’ than on the industrialized nations or multinationals, as the former is the most highly rated factor in fourteen of the nations. In fact, in all of the high-income countries except Japan, citizens assign most responsibility to overpopulation. However, people in these countries also place a good deal of responsibility on industrialized nations and multinationals as well. Furthermore, respondents in

Table 6. Perceived contributors to environmental problems in developing countries* (%)

Economic level (per capita GNP)

	% who say each contributes 'a great deal'		
	Consumption by industrialized countries	Multinational companies	Overpopulation in developing countries
<i>Low income</i>			
Nigeria	47	47	55
India	36	30	61
Philippines	44	41	52
Turkey	64	39	52
Poland	25	21	17
Chile	43	37	37
<i>Middle income</i>			
Mexico	55	51	54
Uruguay	48	50	43
Brazil	46	45	37
Hungary	14	13	19
Russia	29	28	18
Portugal	54	51	41
Korea (Rep.)	42	41	29
<i>High income</i>			
Ireland	43	43	46
Great Britain	45	43	53
Netherlands	12	16	32
Canada	42	44	50
United States	41	35	50
Denmark	34	35	42
Germany (West)	60	55	62
Norway	57	53	60
Japan	38	25	22
Finland	49	42	57
Switzerland	33	34	52

Note: *Respondents were asked: 'How much do you think each of the following contributes to environmental problems in developing countries—a great deal, a fair amount, not very much, or none at all?': a. Consumption of the world's resources by industrialized countries; b. Multinational companies operating in developing countries; c. Overpopulation in these developing countries.'

Source: Riley E. Dunlap, George H. Gallup, Jr., and Alec M. Gallup (1993), *Health of the Planet* (George H. Gallup International Institute, Princeton, NJ).

India, Nigeria, and the Philippines (the three poorest nations in the survey) also place the most emphasis on overpopulation, while majorities in Turkey and Mexico assign a great deal of responsibility to overpopulation. In fact, among the low- and middle-income nations, only the three Eastern European countries and Korea place little blame on overpopulation. Finally, residents of the non-industrialized nations appear no more likely to place the blame for environmental problems within developing countries on the industrialized nations or on multinationals than do their counterparts in the high-income nations.

In short, even when the focus is restricted to environmental problems within the developing nations, citizens from around

the world do not seem as heavily polarized over the roles of the rich and poor nations as might be assumed from conflicts at the Earth Summit. Combined with the results of the prior question, these responses suggest that at least in the nations covered by the survey, residents of poor, Southern nations and those of rich, Northern nations do not hold dramatically differing views of the sources of environmental problems—whether world-wide or within their own nations. There is little evidence of a strong tendency for the poor to blame the rich, and vice versa; rather, there tends to be widespread acceptance of mutual responsibility for environmental problems.

Achieving Sustainable Development

While it is obviously important for the entire world to achieve sustainability, the concept of sustainable development has often been focused specifically on the developing countries. The special problems faced by poor countries in terms of protecting their nation's environmental quality while pursuing economic growth is, in fact, the aspect of sustainable development that has received the most attention.¹⁷ A major policy issue surrounding discussions about achieving sustainable development within the less-developed nations has been the importance of assistance from the richer nations, and this was a major source of controversy at Rio.

There are a variety of ways in which the wealthy nations might assist poorer nations to protect their environments while none the less pursuing economic development. We examined several prominently mentioned efforts via the questions shown in Table 7, which asks respondents whether they favour or oppose five differing actions that 'industrialized nations might take if they were to give help in some way' and which one would *best* help. The table shows the percentages who 'strongly favour' each type of action as well as those choosing each as the single best action.

Not surprisingly, the non-controversial action of providing educational information is the most popular action overall, being strongly favoured by majorities in twenty-two of the twenty-four nations. This is closely followed by supplying technological assistance (strongly favoured by majorities in nineteen nations) and the provision of family-planning information (strongly favoured by majorities in seventeen nations). Providing model laws for business and industry, which might be seen as less readily transferable to the less-developed nations, receives majority support in fifteen nations. Finally, the cancellation of foreign debt, no doubt the most controversial of the five actions, receives strong support from majorities in only ten nations. It should come as no surprise that this action is most popular in the low-income nations, next most popular in the middle-income, and least popular in the high-income nations that would be writing off the debts. Ireland and Norway, among the latter, give most support to

Table 7. Actions industrialized countries might take to help developing countries* and action that would best help(%)**

Economic level (per capita GNP)

	% saying 'strongly favour' each and % choosing each as best action (in parentheses)				
	Education	Technology	Model laws	Family planning	Cancel Debt
<i>Low income</i>					
Nigeria	82 (22)	81 (24)	73 (11)	66 (5)	76 (24)
India	70 (41)	57 (22)	53 (9)	66 (14)	49 (7)
Philippines	72 (37)	72 (23)	62 (12)	69 (9)	65 (18)
Turkey	79 (29)	69 (17)	68 (13)	68 (4)	76 (28)
Poland	52 (7)	67 (49)	49 (4)	33 (1)	60 (23)
Chile	73 (38)	69 (28)	54 (14)	45 (5)	58 (11)
<i>Middle income</i>					
Mexico	70 (21)	70 (21)	68 (20)	70 (10)	70 (17)
Uruguay	86 (22)	87 (19)	82 (12)	71 (12)	76 (31)
Brazil	87 (31)	85 (11)	75 (7)	62 (9)	79 (36)
Hungary	46 (13)	48 (43)	37 (7)	36 (6)	33 (20)
Russia	71 (15)	70 (36)	59 (10)	29 (3)	39 (16)
Portugal	66 (43)	61 (27)	58 (10)	42 (3)	51 (11)
Korea (Rep.)	66 (20)	74 (51)	58 (12)	32 (2)	42 (8)
<i>High income</i>					
Ireland	73 (39)	71 (10)	56 (15)	57 (12)	50 (14)
Great Britain	61 (28)	60 (24)	45 (5)	64 (20)	39 (13)
Netherlands	56 (27)	57 (32)	51 (10)	57 (9)	31 (11)
Canada	66 (42)	54 (21)	55 (15)	55 (11)	30 (7)
United States	63 (41)	48 (20)	50 (15)	57 (13)	24 (5)
Denmark	64 (35)	46 (16)	36 (12)	62 (22)	35 (6)
Germany (West)	55 (26)	50 (13)	44 (15)	59 (23)	32 (15)
Norway	69 (34)	55 (19)	43 (6)	67 (14)	49 (18)
Japan	48 (17)	48 (37)	24 (13)	22 (5)	18 (2)
Finland	58 (27)	50 (29)	38 (12)	62 (22)	30 (4)
Switzerland	59 (24)	47 (19)	32 (10)	59 (26)	38 (18)

Note: *Respondents were asked: 'Protecting the environment is difficult for any country, but especially for developing countries. I'm going to read you a list of actions industrialized countries might take if they were to give help in some way. For each, tell me how strongly you favour or oppose each of the following—strongly favour, somewhat favour, somewhat oppose, strongly oppose. Encourage industrialized countries to . . . a. Provide developing countries with information to help educate citizens about environmental protection; b. Supply technology and equipment to control pollution and cope with environmental problems; c. Provide model environmental laws to put appropriate restrictions on business and industry; d. Supply family planning information to lower birth rates and manage population problems; e. Cancel some of the foreign debt owed by developing nations so this money can be put into environmental protection.' **'Which *one* of these actions by industrialized countries do you think would *best* help developing countries deal with their environmental problems—educational materials, supply technology and equipment, provide model environmental laws, supply family planning information, or cancel some foreign debt?'

Source: Riley E. Dunlap, George H. Gallup, Jr., and Alec M. Gallup (1993), *Health of the Planet* (George H. Gallup International Institute, Princeton, NJ).

this action, while Japan and the United State are the least favourable.

Perhaps the most striking feature of the results in Table 7 is that there is strong support for nearly all of the actions across most of the countries, reflecting awareness of the necessity of assisting the less developed nations to protect their environments. There are also few discernible patterns in support for different actions across countries in differing income levels. In addition to less enthusiasm for debt cancellation among the high-income nations, there is somewhat more scepticism about the utility of providing model laws among these nations—especially the Scandinavian countries. Overall, citizens in low-income nations appear eager for all types of assistance designed to help them protect

their environments, including family planning.

In order to get a better sense of citizen priorities for sustainable-development policies, we next asked respondents to indicate: 'Which *one* of these actions by industrialized countries do you think would *best* help developing countries deal with their environmental problems?' and repeated the list of items used in the prior question. The figures within the parentheses in Table 7 show the percentage choosing each item as the single 'best' action. Again, education is the most preferred action, followed by technological assistance. Family planning continues to receive considerable support among residents of most of the high-income nations, but much less so as the single best action among those in low-income nations. The reverse is the case for debt cancellation, which

overall receives relatively more support as the best action than it did in the previous question.

In sum, the results in Table 7 reveal a fair amount of compatibility between the views of citizens in the less developed nations and those in highly developed nations in terms of what the latter might do to assist the former in achieving sustainable development. Only when attention is focused on the single best action does substantial divergence emerge. Citizens in the low-income nations are understandably more likely to favour debt cancellation and less likely to favour family planning than are those in the high-income nations. In the real world, of course, these actions are not mutually exclusive. Importantly, across all nations there is a strong recognition of the importance of the wealthier nations providing educational and technological assistance in order to help the poorer nations protect their environments.

While concrete proposals to help the less developed nations achieve sustainable development will no doubt be the source of continued debate and disagreement in policy arenas, as are most international environmental agreements,¹⁸ the foregoing results suggest that in most countries the public sees the need for wealthy nations to provide assistance to poorer ones in order to help the latter protect the quality of their environments, and supports a wide range of activities designed to accomplish this goal.

Attitudes Towards an International Environmental Agency

A topic that has received considerable attention in recent years is the importance of strengthening international mechanisms for protecting the environment.¹⁹ The growing recognition of the global dimensions of environmental problems has led to the establishment of several international environmental conventions and treaties, but little progress has been made in setting up effective regulatory agencies designed to ensure their implementation. This is not surprising, as international regulatory bodies pose major challenges to traditional notions of national sovereignty. To examine public attitudes toward an international environmental agency we asked two questions, one dealing with the funding for such an agency and the other dealing with the granting of authority to it. The questions and results are shown in Table 8.

The first column shows the percentages saying they either 'strongly favour' or 'somewhat favour' their own national government 'contributing money to an international agency to work on solving global environmental problems'. As can be seen, there is considerable support for funding such an agency, with majorities in every nation at least somewhat in favour of this. These majorities range from a high of 90 per cent in Finland and 89 per cent in Great Britain and the

Netherlands to a low of 56 per cent in Brazil. The issue of outside determination of the fate of the Brazilian rain-forest has probably made residents of Brazil somewhat cautious about international regulatory bodies.

When we asked respondents if they 'favour or oppose giving an international agency the authority to influence [their] government's policy in environmentally important areas', there was somewhat less enthusiasm. Although majorities favour this in every nation, they are often only slim majorities—noticeably smaller than in the case of providing funding for such an agency. And, as was the case in terms of funding, there is somewhat less enthusiasm for granting authority to an international environmental agency among residents of the less developed nations than among their counterparts in the rich nations.

Table 8. Support for contribution to an international environmental agency and for giving authority to the agency (%)

	Favour contributing money to agency*	Favour giving authority to agency**
Finland	90	74
Netherlands	89	75
Great Britain	89	73
Hungary	84	72
Portugal	83	74
Korea (Rep.)	83	74
Norway	83	65
Germany (West)	82	78
Russia	79	76
Ireland	79	70
Switzerland	79	71
Japan	78	65
Denmark	78	52
Poland	78	70
Mexico	77	61
Canada	77	70
India	75	57
Philippines	75	64
Turkey	75	60
United States	74	63
Nigeria	73	70
Chile	68	54
Uruguay	61	54
Brazil	56	62

Note: *Respondents were asked: 'Would you favour or oppose our government contributing money to an international agency to work on solving global environmental problems—strongly favour, somewhat favour, somewhat oppose, or strongly oppose?' **'Would you favour or oppose giving an international agency the authority to influence our government's policy in environmentally important areas—strongly favour, somewhat favour, somewhat oppose, or strongly oppose?'

Source: Riley E. Dunlap, George H. Gallup, Jr., and Alec M. Gallup (1993), *Health of the Planet* (George H. Gallup International Institute, Princeton, NJ).

Taken together, these results reveal a substantial degree of support for the establishment of an international agency designed specifically to deal with environmental problems. Strong majorities in most nations support their governments funding such an agency (although they tend to be smaller among the low-income nations, as one would expect), and at least slim majorities are in favour of granting such an agency some degree of authority in the environmental affairs of their own nation. While it is impossible to judge in the absence of trend data, these results probably reveal a major shift in public recognition of the importance of dealing with environmental problems at the international level compared to a decade or two ago. (This support seems consistent with the widespread perception of world environmental problems as very serious, as documented above.) It also seems likely that had we inquired about support for a 'Commission on Sustainable Development' devoted to both environmental protection and economic development, as proposed at Rio,²⁰ we would have found even stronger support.

Summary

The results of the various items concerning attitudes towards environment and development are rather more difficult to summarize than were those concerning perceptions of environmental problems. None the less, as was the case for environmental perceptions, the results of the Gallup survey do not reveal major differences between citizens in the wealthy and poor nations in terms of attitudes toward environment and development. Residents of the wealthy nations tend to accept a good deal of responsibility for world environmental problems, while those in poorer nations do not absolve themselves of blame. Similarly, when it comes to environmental problems within the less developed nations, there is a fairly similar tendency for both consumption among industrialized nations and overpopulation in developing nations to be seen as contributing factors.

When we turn to policy actions designed to help the less developed nations achieve sustainable development, we again find broad support for a wide range of actions. Only on the issue of cancellation of foreign debt do we find major differences in degree of support between wealthy and poor nations, and this emerges most clearly when we force respondents to choose the *single* best action. Likewise, there is broad support across all types of nations for an international agency empowered to enforce environmental protection regulations, albeit somewhat less in the poorer countries.

Thus, while there are obviously some differences in opinion, overall we did not find residents of the wealthy, industrialized nations to hold drastically differing views of the relative contributions of rich and poor nations to environmental problems—nor of policies for dealing with environmental problems—than do residents of poorer,

less developed nations. The huge chasm between leaders from the wealthy nations and those from the developing and poor nations that was apparent among world leaders at Rio does not emerge among the general public of two-dozen nations around the world included in the survey.

Conclusion

Those who see world-wide environmental problems as serious, and environmental protection as a major international goal, will probably take heart from the findings of Gallup's *Health of the Planet* survey. The results presented above, along with others obtained from the survey, reveal that environmental deterioration is seen as very serious by citizens of all types of nations. While the foci of their concerns vary somewhat, residents of both rich and poor countries see environmental conditions as serious problems. No longer is concern about environmental quality limited to those who live in the wealthy, industrialized northern hemisphere—if it ever was. Furthermore, citizens in the two-dozen nations included in the survey do not reveal the vast polarization in terms of who is seen as responsible for environmental problems, nor in terms of what policies ought to be employed to combat such problems, that was present among world leaders attending the Earth Summit.²¹

The *Health of the Planet* survey demonstrates virtually world-wide citizen awareness that our planet is indeed in poor health, and great concern for its future well-being. The results not only document widespread citizen awareness and concern, but highlight the existence of a greater degree of international consensus about environmental problems than is widely assumed to exist, and than was certainly reflected at the Earth Summit. Those concerned about the future of the planet can only hope that world leaders will continue to strive to overcome their differences and move toward a similar degree of consensus in future international gatherings and negotiations on environmental issues.

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10. Frequency distributions for all response categories for this and subsequent items are shown, *ibid*.
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