

**Results of the Third Annual**  
**“Questionnaire on Environmental Problems and the Survival of Humankind”**  
*Focus on Agenda 21*

**REPORT**

**ASAHI GLASS FOUNDATION**

December 1994

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## Acknowledgments

This report contains the results of the third annual "Questionnaire on Environmental Problems and the Survival of Humankind" conducted by the Asahi Glass Foundation. This year's questionnaire was sent out in April, and returns were accepted through July 8, 1994.

As last year, the aim of this year's questionnaire was to gauge the perceptions of members of governmental organizations (GOs) and nongovernmental organizations (NGOs) regarding such issues as the question of survival now facing humankind, efforts to alter lifestyles and consumption patterns, strategies for solving overpopulation problems and coordinating related aid, and progress achieved since the Earth Summit on environmental conservation. Furthermore, this year's survey included questions that delve more deeply into the significance and details of Agenda 21 in addition to examining international efforts following up on the Earth Summit.

We would like to take this opportunity to extend our sincere thanks to everyone who took the time to respond and to the many GOs and NGOs that offered their cooperation. We are also deeply indebted to Professor Akio Morishima of Nagoya University's law department for his invaluable advice at all stages of the project.

In closing, we ask that specialists from many fields of endeavor give us their advice and opinions regarding the questionnaire so that future surveys may yield even more comprehensive, relevant results.

December 1994

Asahi Glass Foundation

## I. Facts about the third annual “Questionnaire on Environmental Problems and the Survival of Humankind” *Focus on Agenda 21*

**Response period:** Questionnaires were sent out in April 1994 with a return deadline of July 8, 1994.

**Questionnaire respondent pool:** Selected from members of GOs and NGOs in the UNEP and Asahi Glass Foundation databases.

**Aim:** This questionnaire was designed to gauge the perceptions of respondents, mainly specialists from both GOs and NGOs concerned with global environmental problems, regarding the progress of efforts to conserve the environment since the United Nations Conference on Environment and Development, or Earth Summit, held in Rio de Janeiro in June 1992. In addition, we hope to draw attention once again to Agenda 21, the important global action plan for the 21st century agreed upon at the Earth Summit.

**Questionnaires mailed:** 2,416

**Questionnaires returned:** 504\*

**Response rate:** 20.8%

\* Questionnaires returned as of July 8, 1994. Although 48 additional responses were later received, these were not included in the survey results.

### Breakdown of respondents by region, age, sex, and profession

<b>Region</b>	<b>(%)</b>
Japan	189 (37.5)
Asia (excluding Japan)	92 (18.3)
United States and Canada	23 (4.6)
Latin America	36 (7.1)
Western Europe	62 (12.3)
Eastern Europe/former Soviet Union	17 (3.4)
Middle East	4 (0.8)
Africa	53 (10.5)
Oceania	22 (4.4)
No response	6 (1.2)
<b>Total</b>	<b>504 (100.0)</b>

<b>Sex</b>	<b>(%)</b>
Male	390 (77.4)
Female	110 (21.8)
No response	4 (0.8)
<b>Total</b>	<b>504 (100.0)</b>

<b>Occupational affiliation</b>	<b>(%)</b>
Governmental organization (GO)	131 (26.0)
Nongovernmental organization (NGO)	252 (50.0)
Other	88 (17.5)
No response	33 (6.5)
<b>Total</b>	<b>504 (100.0)</b>

Notes: 1) All percentages in this analysis were calculated based on the 504 replies received as of July 8, 1994.

2) All figures in this report have been rounded to the first decimal place.

## II. Summary of questionnaire results

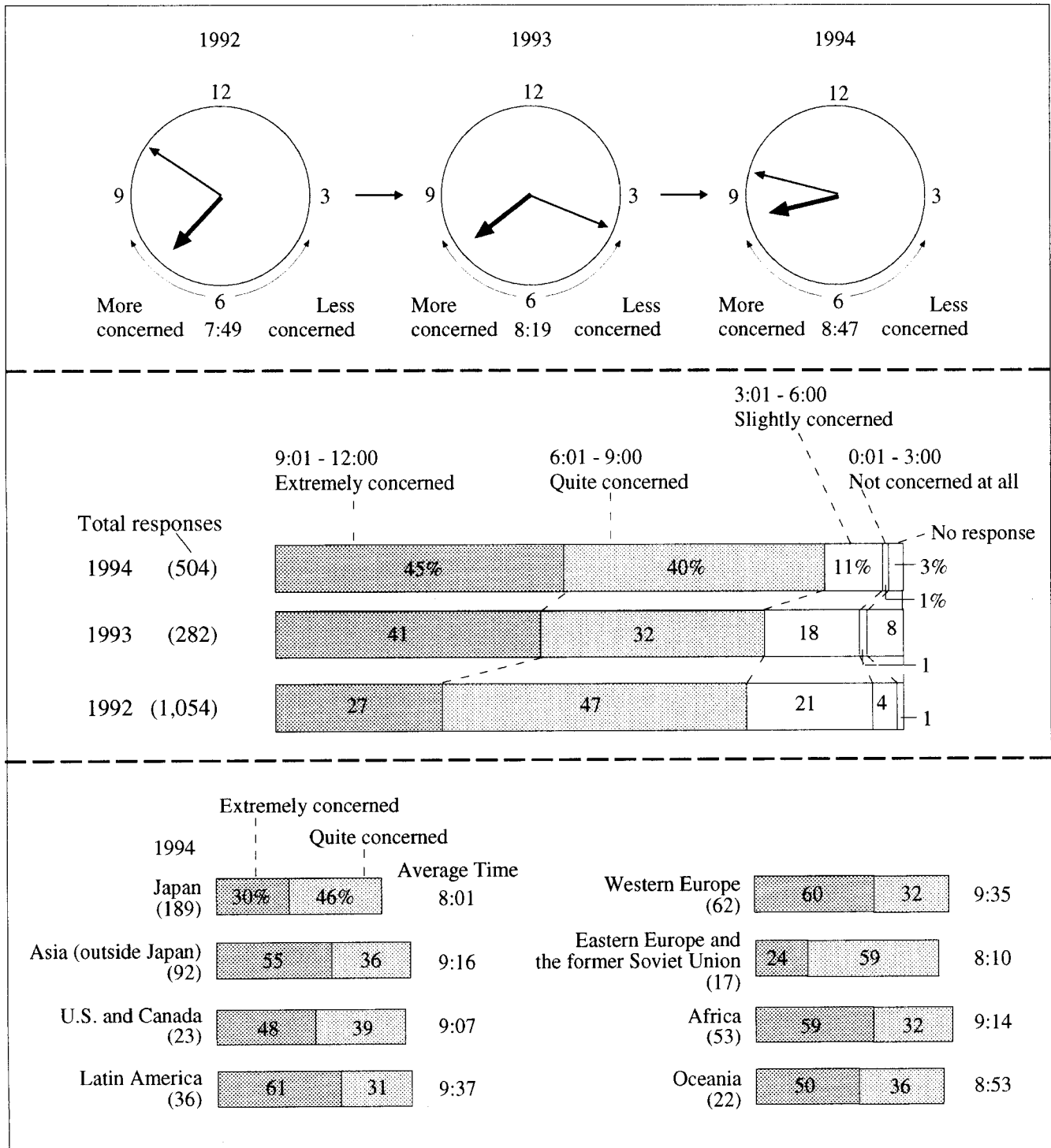
- Overall, respondents replied that since the Earth Summit in Rio de Janeiro in June 1992, progress has been made in their own countries in specific areas such as environmental education, government regulations to conserve the environment, and protection of the ozone layer. At the same time, respondents expressed satisfaction with progress in activities undertaken by NGOs, local governments, and citizens' groups in their own countries. However, progress remains inadequate in such crucial areas as desertification, global warming, acid rain, overpopulation, and poverty. These results are nearly the same as those in last year's survey.
- Since this questionnaire was first conducted three years ago, the world's environmental experts from both GOs and NGOs have grown more and more concerned about the survival prospects of humankind. In addition, this year's respondents felt less able to adapt to a more frugal lifestyle than did last year's respondents.
- There were several major differences between responses from members of NGOs and those from GOs. Members of NGOs tended to rate more highly the significance of Agenda 21, and members of GOs felt far more positive about progress being made in such areas as ozone layer protection, government regulations, international cooperation, and environmental policies in the industrial world. Opinions regarding a solution to overpopulation contrasted particularly sharply between the two groups. Members of NGOs expressed strong support for the expansion of women's rights, while members of GOs favored the promotion of economic progress in developing countries as the best solution.
- Compared with respondents from other countries, Japanese respondents exhibited a much more optimistic outlook on environmental problems and their solutions, perhaps pointing to a general lack of awareness and serious consideration of these problems in Japan. For example, out of responses from eight regions, those from Japan showed the least concern about the survival prospects of humankind and the least enthusiasm about adapting to a more frugal lifestyle. However, this year Japanese respondents expressed a lower level of satisfaction with Japan's progress in addressing most of Agenda 21's issues, a trend that may reflect greater awareness of the difficulties in solving environmental problems.
- Expectations of the United Nations Commission on Sustainable Development (UNCSD) remain low. Respondents from the United States and Western Europe in particular felt that the UNCSD must do more to fulfill its stated role.

# 1. HUMANITY IN CRISIS

**Question 1.** Indicate with a time your concern about the survival prospects of humankind in light of the deterioration of the environment, taking into consideration the times and associated concern levels listed below.

0:01 - 3:00 Not concerned at all    3:01 - 6:00 Slightly concerned    6:01 - 9:00 Quite concerned    9:01 - 12:00 Extremely concerned

- (1) The average time indicated by all respondents was 8:47 this year, 8:19 last year, and 7:49 the year before last.
- (2) Eighty-five percent of respondents chose a time later than 6:00 ("quite concerned" or "extremely concerned").
- (3) In Japan, the average reply was 8:01, and 76% answered "quite concerned" or "extremely concerned." These responses were the lowest among the eight regions surveyed.



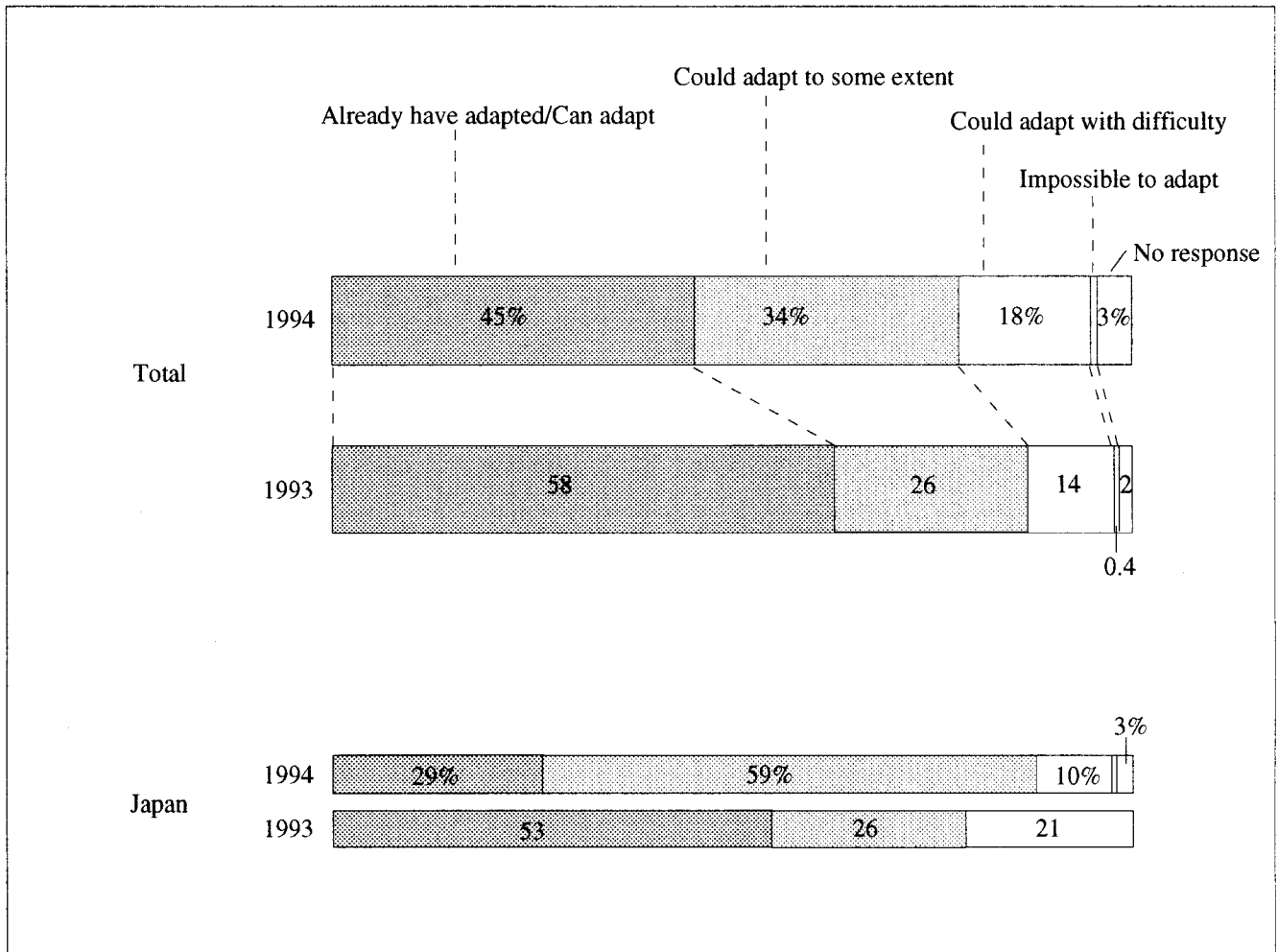
**Comments**

Looking at the questionnaire results over the past three years, recognition of the severity of the global environmental situation is increasing. In Japan, awareness of the crisis is the lowest of all regions surveyed.

## 2. LIFESTYLE CHANGES

**Question 2.** Lately, there is a growing consensus that we should change our overconsumption–throwaway lifestyle. How do you feel about adapting a more frugal lifestyle?

- (1) Slightly less than half (45%) of the respondents answered that they could change their overconsumption–throwaway lifestyle, down 13 percentage points from the previous year.
- (2) In Japan, only 29% answered “already have adapted/can adapt,” a drop of nearly half from the previous year, while those who replied “could adapt to some extent” more than doubled.



### Comments

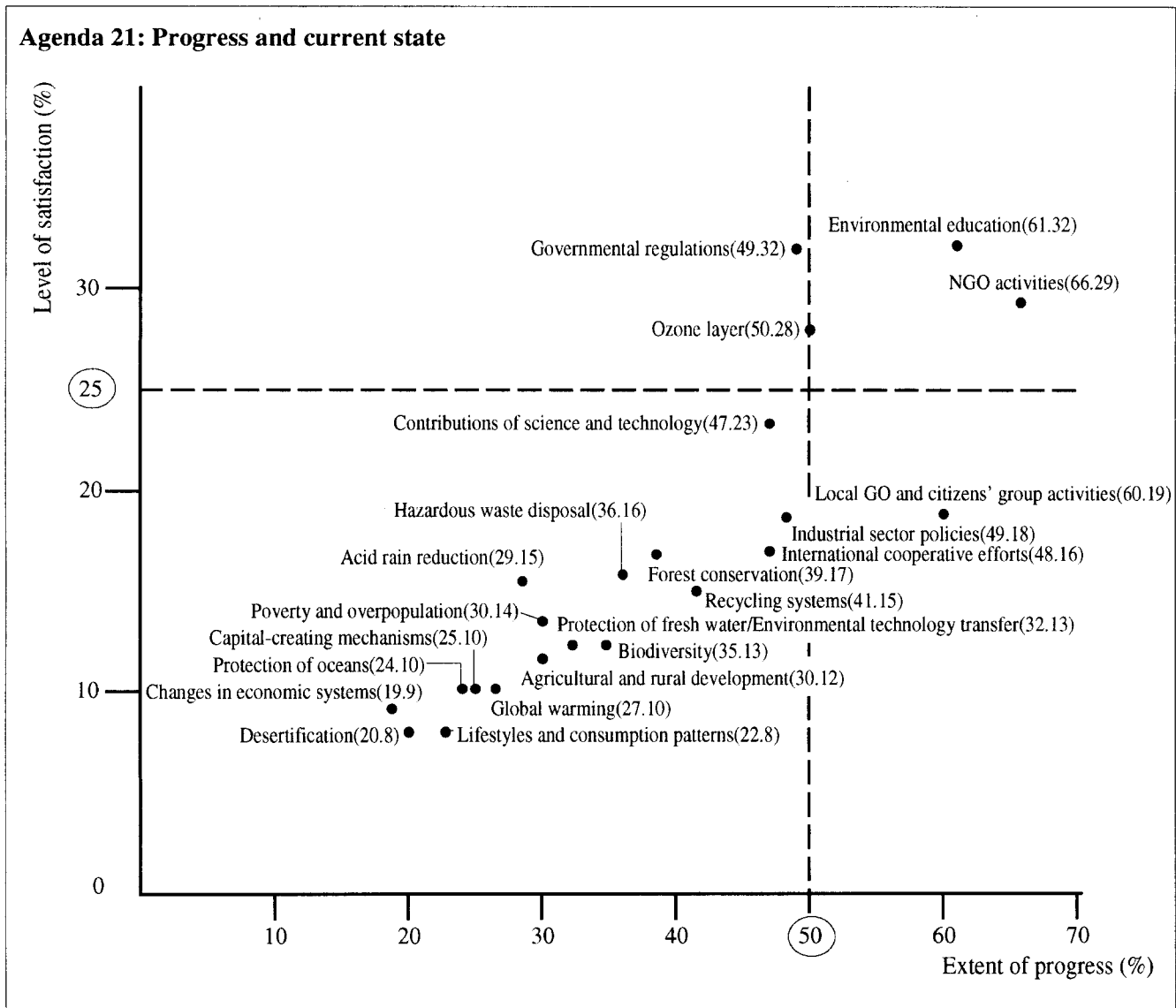
The number of people with an earnest intention to change their current lifestyle has diminished. This trend is seen as part of a drop in consciousness levels throughout the world following the highly publicized Earth Summit in 1992.



### 3. AGENDA 21: PROGRESS AND CURRENT STATE

**Question 3.** Since the Earth Summit held in Rio de Janeiro in June 1992, to what extent has progress been achieved in the areas described below? Also, indicate your level of satisfaction regarding the current state of these areas. For both sections, consider the situation *in your own country only*.

(1) The progress of activities conducted by NGOs, local governments, and citizens' groups was rated most highly. Ratings on the extent of progress and level of satisfaction were relatively high with regard to government regulations, environmental education, and protection of the ozone layer. Progress made in concrete areas such as efforts to alter lifestyles and consumption patterns and efforts to establish capital-creating mechanisms, however, was regarded as rather delayed. Little progress was recognized on specific aspects of environmental problems (global warming, acid rain, etc.).



**Notes:**

1. The horizontal axis indicates the extent of progress as calculated from ratings of "some progress" and "significant progress," while the vertical axis indicates the level of satisfaction with the current state as calculated from ratings of "quite adequate" and "completely adequate."
2. The two figures in parentheses following each item description represent the extent of progress and the current level of satisfaction, respectively, as referred to in (1) above.
3. Item descriptions are shortened from full descriptions found in the questionnaire.

(2) Compared with the previous year, ratings of the extent of progress made in addressing basic problems of poverty and overpopulation advanced seven percentage points.

Items whose progress was regarded as having slowed were: policies to preserve the earth's biodiversity, which decreased 15%, policies to counter global warming, down 11%, environmental protection policies of the industrial sector, down 9%, science and technology's contributions, down 9%, promotion of environmental education, down 9%, formation of recycling systems, down 7%, and governmental regulations, down 7%.

(3) From a weighted average, both the extent of progress and the level of satisfaction in Japan were lower in the majority of categories compared to the previous year (17 items were lower in the extent of progress and 20 lower in the level of satisfaction). Notably, compared with other regions there were more items that Japan indicated to have progressed less or with which satisfaction was lower. Areas in which progress was felt to be greatly lower were: efforts to alter lifestyles, efforts to counter global warming, and science and technology's contributions.

### Comparison of weighted average responses, 1993 and 1994 (overall and by region)

	Extent of progress		Satisfaction with current state		Japan		Asia (outside Japan)		U.S. and Canada		Latin America		Western Europe		Eastern Europe and the former Soviet Union		Africa		Oceania	
	93	94	93	94	a	b	a	b	a	b	a	b	a	b	a	b	a	b	a	b
(1) International cooperative efforts	51 ↘ 48	15 ↗ 16	3	2	-	-	1	0	-	0	5	0	-	1	2	1	-	-	-	-
(2) Poverty and overpopulation	23 ↗ 30	9 ↗ 16	2	0	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-
(3) Lifestyles and consumption patterns	26 → 22	6 ↗ 8	④	2	-	-	2	-	-	0	-	1	-	-	-	0	0	0	-	-
(4) Local GO and citizens' group activities	63 → 60	22 ↘ 20	0	1	-	-	-	1	0	0	2	2	2	-	1	1	-	0	-	-
(5) NGO activities		66		26																
(6) Industrial sector policies	58 ↘ 49	26 ↘ 17	3	5	3	0	3	4	4	1	3	3	-	-	3	4	3	-	-	-
(7) Global warming	38 ↘ 27	15 ↘ 10	④	3	3	-	-	1	0	0	4	2	1	-	-	0	2	1	-	-
(8) Ozone layer	48 → 50	26 ↗ 29	3	3	2	-	-	-	0	0	1	0	-	-	-	0	1	1	-	-
(9) Acid rain reduction	26 ↗ 29	14 → 15	2	5	1	-	-	0	-	-	-	-	-	-	-	2	2	3	-	-
(10) Forest conservation	44 ↘ 39	23 ↘ 17	2	3	2	2	-	-	4	0	-	0	1	5	2	4	-	-	-	-
(11) Desertification	24 ↘ 20	11 ↘ 9	0	2	2	0	-	-	2	3	-	0	8	3	-	2	0	3	-	-
(12) Agricultural and rural development		30		12																
(13) Biodiversity	50 ↘ 35	20 ↘ 13	3	2	3	2	0	0	2	0	2	2	3	3	3	5	-	1	-	-
(14) Protection of oceans	42 ↘ 24	23 ↘ 10	3	4	5	3	1	-	6	3	4	3	7	6	7	5	-	-	-	-
(15) Protection of fresh water	42 ↘ 32	23 ↘ 13	3	5	4	2	-	-	4	3	2	3	2	2	6	5	1	1	-	-
(16) Hazardous waste disposal	39 ↘ 36	21 ↘ 16	2	4	2	-	4	2	-	-	-	3	2	4	8	4	-	2	-	-
(17) Recycling systems	48 ↘ 41	19 ↘ 15	3	2	-	-	-	-	2	1	1	2	1	0	-	-	6	5	-	-
(18) Contributions of science and technology	56 ↘ 47	24 → 23	④	3	0	1	1	1	2	-	-	-	1	-	2	2	2	3	-	-
(19) Environmental technology transfer	29 ↗ 32	13 → 13	1	1	-	-	-	3	6	3	-	0	1	1	-	-	-	-	-	-
(20) Capital-creating mechanisms	27 ↘ 25	10 → 10	0	2	0	-	-	-	2	1	1	0	5	-	4	3	-	-	-	-
(21) Environmental education	70 ↘ 61	31 → 32	1	1	1	-	2	-	2	-	1	0	1	4	4	4	-	-	-	-
(22) Government regulations	55 ↘ 48	29 ↘ 23	0	2	2	-	0	-	2	-	-	2	3	-	2	3	2	2	-	-
(23) Changes in economic systems	19 → 19	9 → 8	3	4	-	-	2	1	2	3	1	-	4	0	2	5	-	-	-	-

<sup>a</sup>Differences of the weighted average in the extent of progress (Shown only when '93 - '94 > 0)

<sup>b</sup>Differences of the weighted average in the level of satisfaction with the current state (Shown only when '93 - '94 > 0)

(4) In a comparison of GOs and NGOs, the former were more satisfied with the extent of progress in most items. The awareness gap was particularly large in areas of individual policies: protection of the ozone layer, government regulations, international cooperation, protection of oceans, protection of fresh water resources, and environmental protection policies of the industrial sector.

However, the gap between GOs and NGOs was small and the level of satisfaction was high for those items that can be addressed by the joint efforts of government and the citizenry: activities by local governments and citizens' groups and formation of recycling systems.

#### Extent of progress in environmental protection since the Earth Summit [GOs vs. NGOs]

	Responses indicating "significant progress" or "some progress"		
	GOs	NGOs	Point differential
( 1 ) International cooperative efforts	61.1	42.9	18.2
( 2 ) Poverty and overpopulation	39.7	26.6	13.1
( 3 ) Lifestyles and consumption patterns	26.7	19.5	7.2
( 4 ) Local GO and citizens' group activities	61.0	59.1	1.9
( 5 ) NGO activities	64.1	70.7	6.6
( 6 ) Industrial sector policies	57.2	40.9	16.3
( 7 ) Global warming	33.5	23.4	10.1
( 8 ) Ozone layer	62.6	42.0	20.6
( 9 ) Acid rain reduction	32.8	26.6	6.2
(10) Forest conservation	49.7	36.1	13.6
(11) Desertification	21.4	20.3	1.1
(12) Agricultural and rural development	35.1	29.8	5.3
(13) Biodiversity	44.3	32.2	12.1
(14) Protection of oceans	36.7	18.7	18.0
(15) Protection of fresh water	42.8	26.2	16.6
(16) Hazardous waste disposal	43.5	28.6	14.9
(17) Recycling systems	40.4	40.5	0.1
(18) Contributions of science and technology	51.9	44.1	7.8
(19) Environmental technology transfer	32.0	32.9	0.9
(20) Capital-creating mechanisms	25.9	23.4	2.5
(21) Environmental education	64.9	60.0	4.9
(22) Government regulations	61.8	42.1	19.7
(23) Changes in economic systems	23.7	17.1	6.6

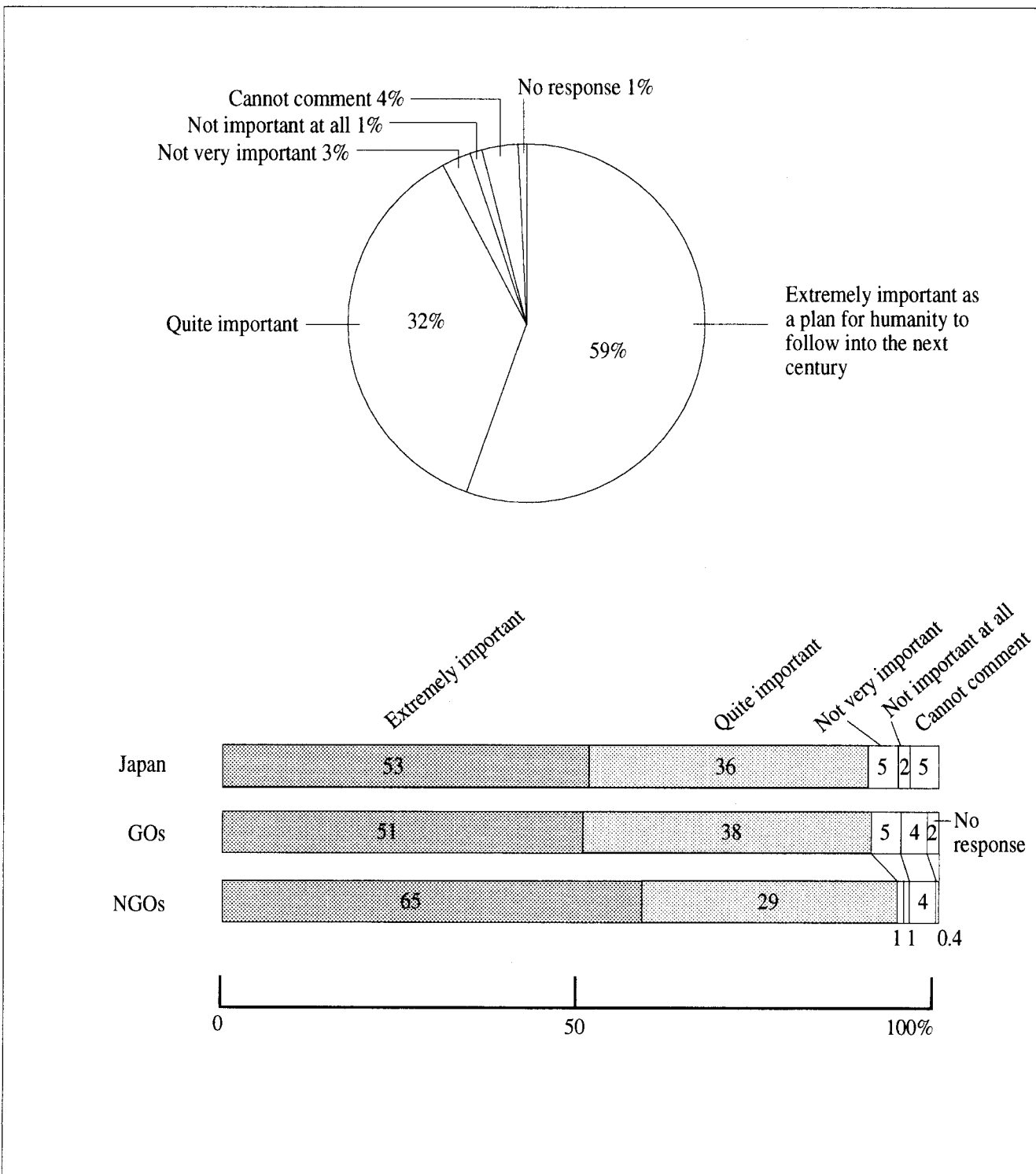
#### Comments

- (1) Since the Earth Summit, local governments, NGOs, and the industrial sector throughout the world have steadily pursued activities to protect the environment. Environmental education has been supported and is broadly recognized, suggesting that efforts may be possible beyond individual undertakings. In many of the specific areas of Agenda 21 in which resolution is difficult, increased progress in government regulations and protection of the ozone layer offer hope for the future.
- (2) The fact that recognition of the problems of poverty and overpopulation dramatically increased from the previous year indicates the influence of the International Conference on Population and Development, held this year.

#### 4. IMPORTANCE OF ITEMS CONTAINED IN AGENDA 21

##### Question 4. How important are the items contained in Agenda 21?

Agenda 21 was recognized as important by more than 90% of the respondents, and 59% of them felt it very important as an action plan for humanity. However, there were different levels of perception by GOs (51% rated Agenda 21 as “very important”) and NGOs (65%). Japan’s recognition of Agenda 21’s importance (53%) was the lowest of the eight regions.



*Comments*

While awareness of Agenda 21 does not yet appear to be generally established, the recognition shown by environmental experts throughout the world is seen as the first step toward international cooperation.

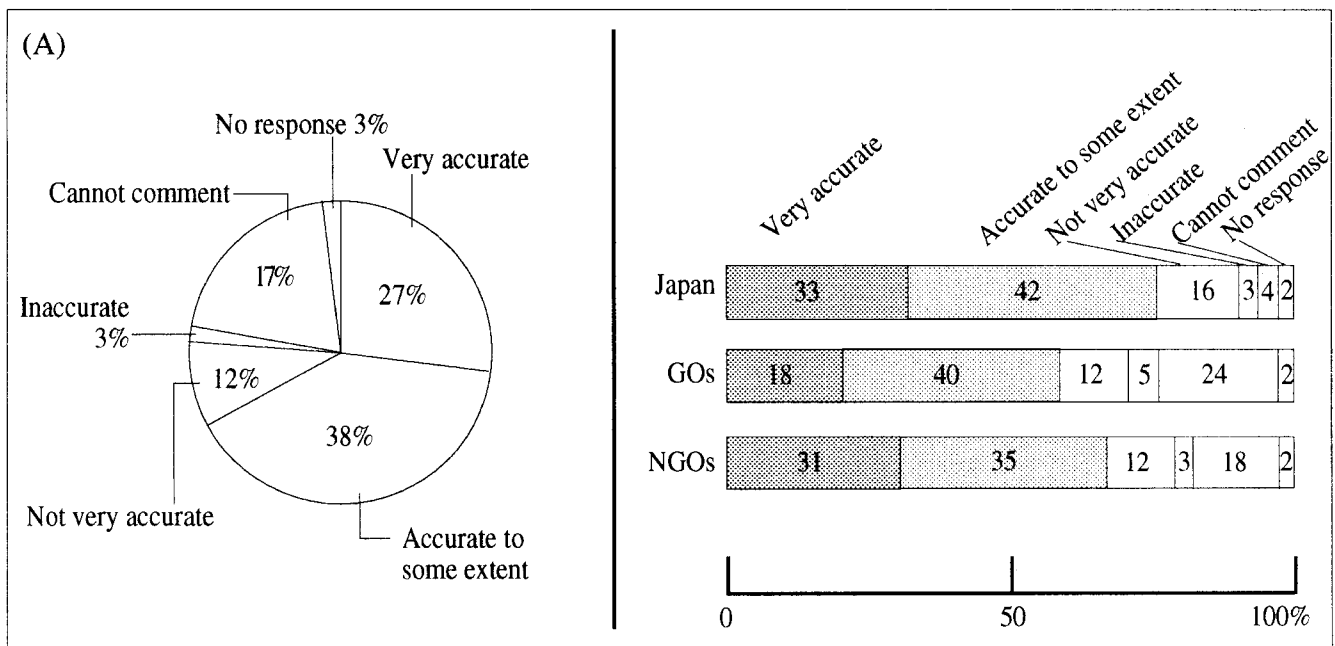
## 5. PERCEIVED INADEQUACIES OF AGENDA 21

**Question 5.** Agenda 21 has been criticized for being inadequate in certain areas. Please circle the response you feel is most appropriate to the following statements (A) to (C).

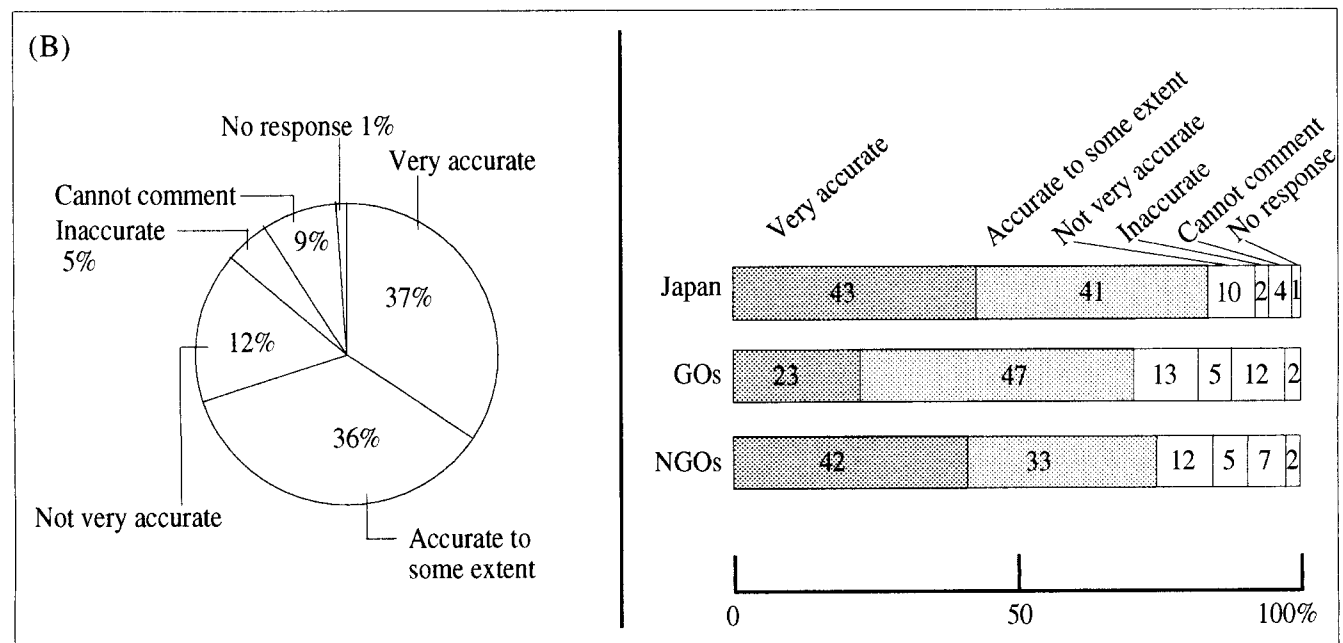
- (A) "Agenda 21 contains little about the environmental effects of nuclear power."  
 (B) "Agenda 21 does not deal with the ways developing countries are affected by multinational companies and the conventions of international trade."  
 (C) "Implementation of Agenda 21 will be difficult as the items are not legally binding, and thus no one is obligated to obey its guidelines."

One-third of the respondents indicated their agreement that there is little reference in Agenda 21 to "nuclear power," "multinational companies and international trade," or "legally binding laws." Respondents from NGOs, however, felt statements A, B, and C to be more accurate than did those from GOs. (Gaps in the responses of "very accurate" between these two groups were large for all three questions.)

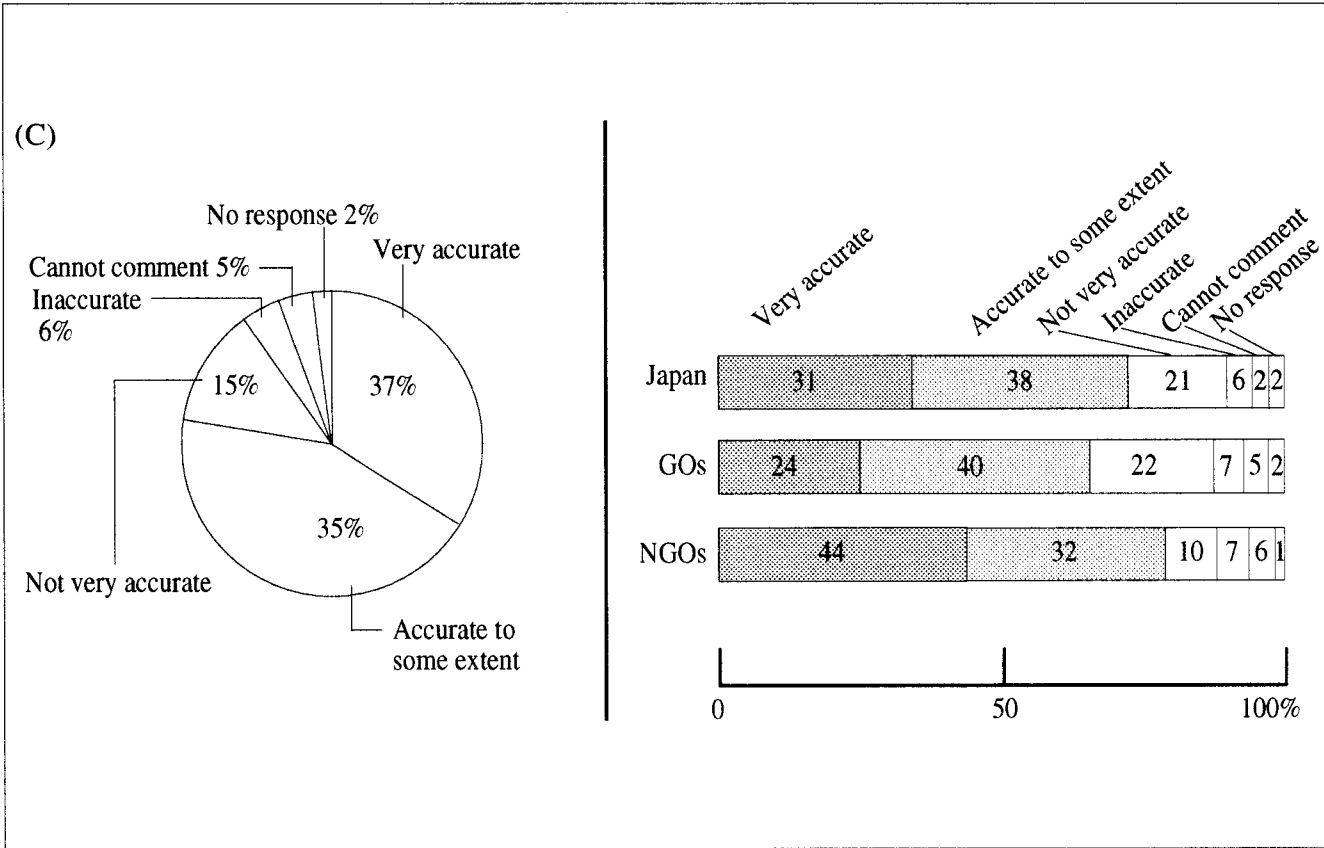
- (1) Twenty-seven percent responded that the fact that "Agenda 21 contains little about the environmental effects of nuclear power" was very accurate. Here also, a gap was noted between GOs ("very accurate": 18%) and NGOs (31%).



- (2) Thirty-seven percent indicated as "very important" that "Agenda 21 does not deal with the ways developing countries are affected by multinational companies and the conventions of trade." Again, there was a difference seen in responses between GOs (23%) and NGOs (42%).



3) Thirty-seven percent overall indicated that it would be very difficult to implement Agenda 21 because the items are not legally binding: GOs (24%), NGOs (44%).



*Comments*

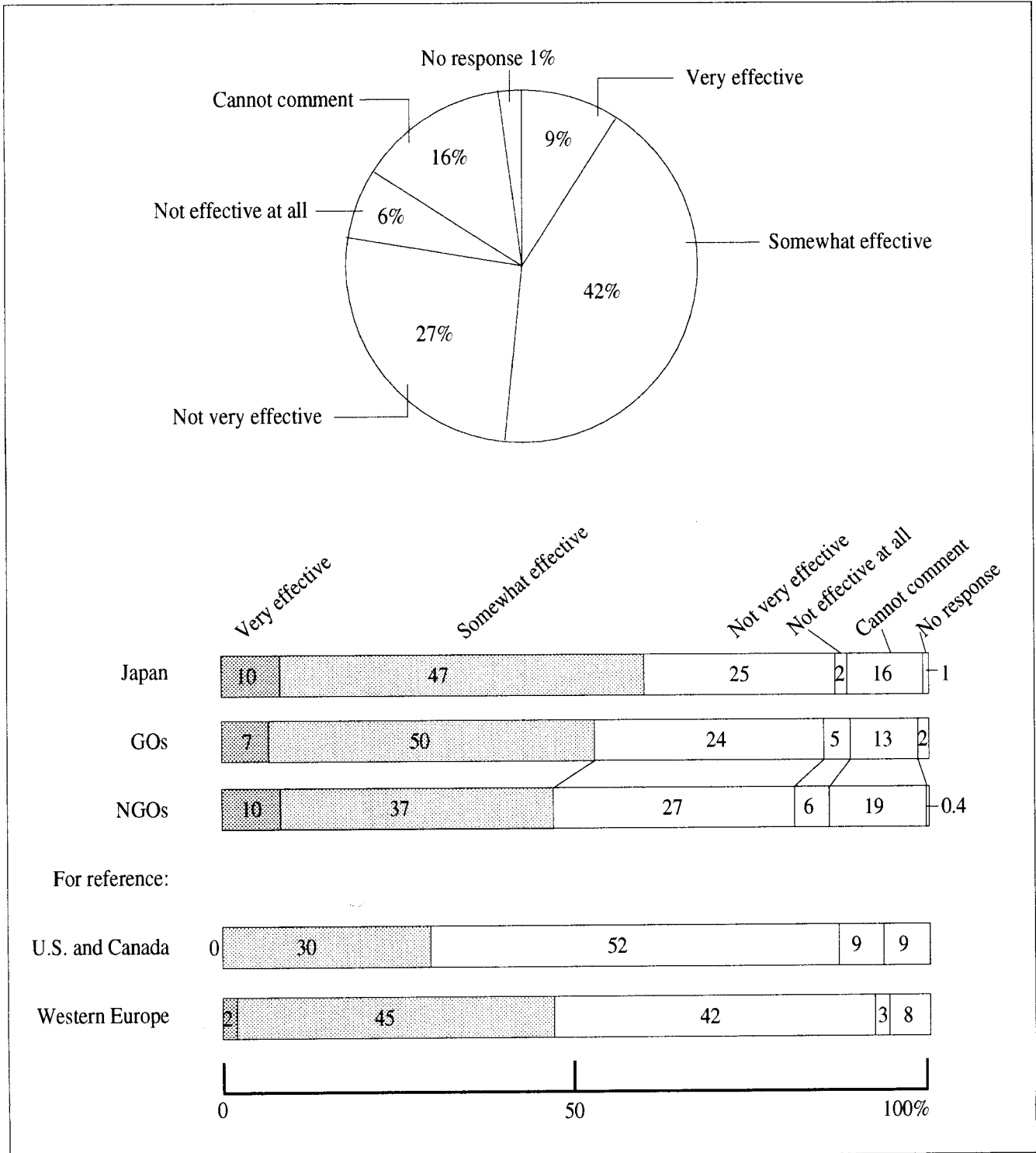
The gap in perceptions of these three issues by GOs and NGOs is large. They must promote dialogue on specific courses of action.

## 6. EFFECTIVENESS OF UNCSD

**Question 6.** The United Nations Commission on Sustainable Development (UNCSD) was established in February 1993 to follow up on achievements made at the United Nations Conference on Environment and Development (UNCED) in 1992. How effective do you think UNCSD will be in the future?

Only 9% of respondents felt UNCSD to have the potential for effectiveness in the future. The harshest views were expressed by the U.S. and Canada and Western Europe.

As to the effectiveness of future action, expectations were generally guarded, with "somewhat effective" being the most common answer. (The total of respondents answering "very effective" and "somewhat effective" was 51%.)



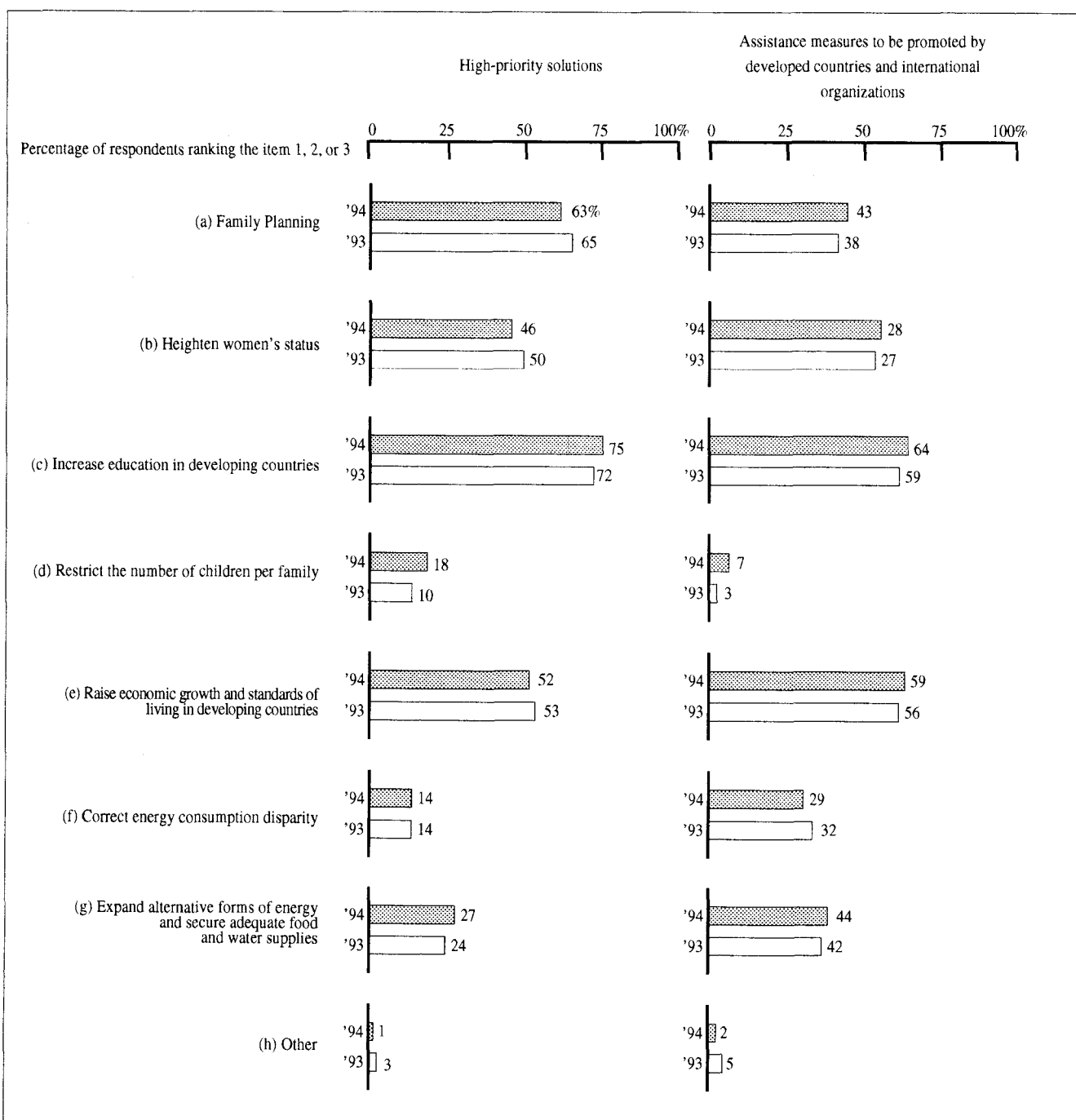
### Comments

These results seem to reflect that UNCSD is fairly new and its role is not yet fully understood. Particularly harsh views held by Western Europe and the U.S. and Canada throw a shadow of uncertainty on the future of UNCSD.

## 7. SOLUTIONS TO OVERPOPULATION AND ASSISTANCE MEASURES TO BE TAKEN BY THE DEVELOPED COUNTRIES AND THE UN

**Question 7.** Among the many solutions to overpopulation, such as limiting population growth or expanding the world's capacity to accommodate people, which do you think should be given highest priority? Choose in order of priority the three best solutions from (a) to (h) below. Also, choose three solutions you think the developed countries and international organizations should promote in the developing countries.

(1) The three solutions given highest priority were family planning, economic development, and increasing the general level of and the number of people receiving education. Solutions that many felt developed countries and international organizations should promote were increasing the general level of and the number of people receiving education, economic development, expanding of alternative forms of energy and securing of adequate supplies of food and water, and family planning. The order of priority of these responses remained the same as the previous year.





- (2) Compared with other developed countries, Japan's respondents ranked heightening women's status in society the lowest among the eight regions in terms of both priority and promotion by developed countries, giving it even lower priority than last year.
- (3) There were remarkable gaps in responses from GOs and NGOs regarding the need for heightening women's status in society: (NGOs were 14 percentage points higher in terms of priority and 13 points higher in terms of assistance measures). This was also true in economic development measures (GOs 13 percentage points higher in terms of priority and 14 percentage points higher in terms of assistance measures).

Which solutions should be given high priority?

Percentage of respondents ranking the item 1, 2, or 3  
(Numbers in parentheses are 1993's results.)

	Family Planning	Heighten women's status	Increase education in developing countries	Restrict the number of children per family	Raise economic growth and standards of living in developing countries	Correct energy consumption disparity	Expand alternative forms of energy and secure adequate food and water supplies	Other
Japan	65(71)	37(48)	82(80)	21(12)	55(54)	19(13)	21(15)	-( 2)
Asia (outside Japan)	63(67)	51(49)	59(58)	26(12)	61(72)	9(12)	22(21)	3( -)
U.S. and Canada	48(64)	78(73)	74(64)	9( 9)	44(36)	4( 9)	26(36)	4( -)
Latin America	67(60)	44(38)	83(84)	6( -)	42(73)	11(16)	33(24)	-( 3)
Western Europe	58(76)	53(58)	66(66)	16(11)	34(40)	11(16)	47(24)	3( 5)
Eastern Europe and the former Soviet Union	65(54)	41(23)	88(77)	-( 8)	47(39)	29(15)	24(23)	6( 8)
Africa	59(65)	42(48)	74(80)	15(20)	68(48)	11( 8)	32(25)	-( -)
Oceania	64(46)	55(68)	86(64)	14( 5)	41(27)	9(27)	32(41)	-(18)
GOs	68(70)	38(50)	76(78)	18( 8)	60(55)	11( 9)	23(19)	2( 0)
NGOs	62(62)	52(49)	75(70)	19(10)	47(52)	14(16)	27(27)	1( 5)

Which solutions should be promoted by developed countries and international organizations?

Japan	43(44)	15(26)	78(77)	10( 7)	74(71)	27(21)	46(39)	-( 3)
Asia (outside Japan)	40(28)	28(28)	51(35)	7( -)	60(63)	35(51)	44(44)	5( -)
U.S. and Canada	57(68)	57(36)	65(59)	4( -)	44(50)	9(14)	17(41)	-(14)
Latin America	33(22)	28(14)	61(57)	-( -)	42(60)	31(38)	36(54)	3( 5)
Western Europe	44(68)	44(34)	53(58)	7( 3)	44(42)	29(24)	47(34)	7(11)
Eastern Europe and the former Soviet Union	29(23)	18(8)	53(62)	6( -)	65(62)	35( 8)	53( 8)	-( -)
Africa	36(28)	38(23)	49(53)	4( 5)	55(53)	38(45)	55(45)	2( 3)
Oceania	64(27)	41(41)	73(64)	5( -)	32(32)	14(32)	46(59)	-(14)
GOs	46(42)	21(26)	63(60)	7( 1)	69(59)	21(28)	41(40)	2( 2)
NGOs	39(36)	34(27)	63(57)	7( 4)	55(55)	32(35)	45(43)	3( 7)

Comments

It is perhaps reasonable that with high expectations placed on education and family planning, little support is given to restricting the number of children per family, especially since this is a controversial issue.

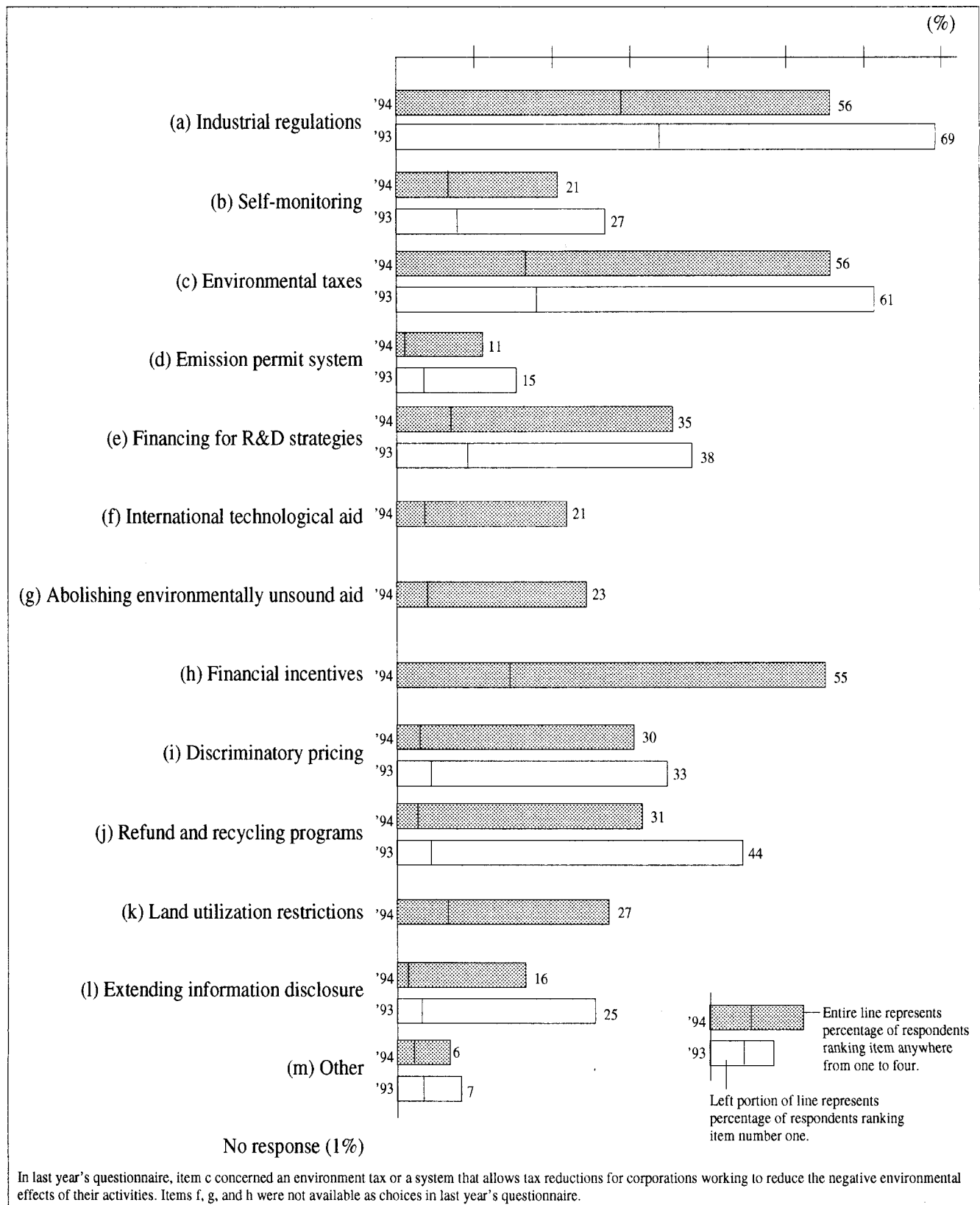
Support of women's rights by NGOs seems to reflect their avowed intention of promoting these rights and the equality of the sexes espoused by the United Nations World Conference on Population and Development.

Meanwhile, high scores are given by GOs to the economic development of developing countries. This seems to reflect the actual state of foreign aid measures being taken by developed countries.

## 8. ECONOMIC MEASURES AND REGULATIONS AIMED AT SOLVING ENVIRONMENTAL PROBLEMS

**Question 8.** From among the following economic measures and regulations aimed at solving environmental problems, which would be most effective *in your country*? Choose four, ranking them from one to four.

(1) Economic measures and regulations ranked the highest were industrial regulations, environment taxes, financial incentives, and financing for R&D strategies.



- (2) More people in Japan than in other regions chose self-monitoring and self-imposed restrictions by corporations and industry.
- (3) Between GOs and NGOs, GOs highly supported direct regulations and international technical assistance, while NGO support was far stronger for abolishing aid programs that exacerbate environmental problems and for establishing recycling systems.

Numbers in parentheses are 1993's results

	Industrial regulations	Self-monitoring	Environmental taxes	Emission permit system	Financing for R&D strategies	International technological aid	Abolishing environmentally unsound aid	Financial incentives	Discriminatory pricing	Refund and recycling programs	Land utilization restrictions	Extending information disclosure	Other	No response
Japan	59 (57)	32 (46)	62 (56)	10 (12)	33 (54)	22	14	51	24 (18)	39 (56)	16	23 (20)	6 (2)	1 (2)
Asia (outside Japan)	63 (74)	20 (19)	46 (70)	7 (12)	41 (30)	25	24	50	30 (42)	29 (35)	41	11 (21)	5 (12)	1 (2)
U.S. and Canada	57 (73)	4 (9)	78 (73)	26 (18)	17 (9)	4	39	78	44 (46)	13 (32)	17	13 (27)	9 (18)	- (-)
Latin America	42 (65)	11 (27)	28 (57)	8 (11)	50 (57)	17	39	58	28 (50)	42 (60)	44	14 (11)	6 (8)	3 (-)
Western Europe	52 (63)	16 (29)	73 (71)	15 (29)	21 (16)	7	24	69	50 (53)	15 (32)	16	10 (21)	7 (5)	5 (3)
Eastern Europe and the former Soviet Union	65 (77)	18 (8)	59 (77)	24 (8)	35 (31)	53	24	53	29 (39)	18 (54)	18	6 (31)	- (8)	- (8)
Africa	49 (70)	9 (33)	36 (53)	6 (15)	51 (55)	34	38	51	23 (20)	23 (38)	40	15 (38)	6 (5)	2 (-)
Oceania	50 (86)	23 (18)	77 (41)	27 (9)	23 (23)	9	18	55	32 (41)	41 (32)	27	9 (41)	9 (9)	- (5)
GOs	62 (67)	22 (31)	54 (58)	15 (24)	34 (44)	27	15	53	27 (29)	29 (41)	31	13 (19)	5 (1)	2 (3)
NGOs	54 (70)	19 (25)	56 (62)	7 (11)	35 (36)	19	29	57	33 (36)	34 (46)	25	18 (27)	6 (11)	0.4 (1)

*Comments*

While expectations in Japan on self-imposed restrictions were a little higher than in other regions, many respondents pointed out the effectiveness of direct regulations and tax-reducing mechanisms.

It is understandable that GOs would more highly support international assistance while NGOs would favor recycling systems, because GOs emphasize political affairs and diplomacy, while NGOs are more inclined to view things from the perspective of individual citizens.

### III. Comments from Respondents

This section contains a selection of respondents' comments to questions four through nine. Each comment is accompanied by the respondent's name, organization, country, and office registration number. Where the respondent has requested anonymity, only his or her gender, if indicated, is denoted by an M or F.

#### 1. Comments pertaining to question four, which concerns the importance of items contained in Agenda 21

- Agenda 21 provides a basic framework for sustainable development of the globe, but it lacks a detailed program for developing countries, whose problem is immediate survival rather than future environmental catastrophe.

M, Federal Government, PAKISTAN 006

- Issues in Agenda 21 are important. Underlying forces (national and international) are given less attention.

M, CEPATA, GUINEA 027

- Agenda 21 was made by the developed countries for the developed countries and thus its aim is very much doubtful, but on the whole it looks like the only way.

M, Allahabad University, INDIA 040

- It is necessary to circulate Agenda 21 in many languages throughout the world. It's less circulated in Mali in French and local languages.

M, Groupe de Recherches et d'Applications Techniques, MALI 062

- It will depend on whether Agenda 21 is internalized by governments in laws and policies and by citizens in environmental action.

Dr. Roger Blakeley, Ministry for the Environment, NEW ZEALAND 102

- As a document integrating biological, social and economic sectors, AGENDA 21 must set the course for the political arena. It is the best blueprint for the next 25 years as to how our natural resource base should be managed.

Richard A. Meganck, Ph.D., United Nations Environment Programme, THAILAND 135

- Agenda 21 is HUMAN centered! Humans are only part of the total environment. So the notion of human centeredness is COMPLETELY WRONG!

M, Foundation for Ecodevelopment, NETHERLANDS 143

- It is extremely important in such countries like the Philippines, where exploitation of natural resources is rampant and damaging.

M, Environmental Mgt. Bureau, PHILIPPINES 190

- The importance of Agenda 21 depends on whether or not its tenets are followed internationally. Agenda 21 is also much less than it might be due to the absence of timetables, targets and deadlines. Poverty, consumption and family planning are also conspicuously absent.

M, USA 204

- The population explosion is not enough considered!

F, Environmental Pressure Group of Suane-Milp, SWEDEN 238

- Agenda 21 is not perfect - but the best plan elaborated up to today.

F, Swiss League for Nature Protection, SWITZERLAND 248

- It's extremely important, but not only as a plan for humanity to follow into the next century. It's also important for living things as a whole. I feel the way we look at environmental matters should change. We speak about the environment by putting humanity at the center of it. But there's no center.

Deniz Oztok, Society for the Protection of Nature, TURKEY 284

- The question is, to what extent can Agenda 21 be put into effect? As a common guideline, I think Agenda 21 has meaning.

Akiko Domoto, Global Legislators Organization for a Balanced Environment, JAPAN J101

•If we don't seize the chance presented by Agenda 21, we will lose this opportunity to make environmental issues a topic of international concern.

Takashi Hirano, Global Environmental Forum, JAPAN J097

•Agenda 21 offers countries a guideline for the enforcement of specific policies and also a basis for follow-up.  
M, Environmental Agency, JAPAN J094

•Recently, I had the chance to visit several countries in Southeast Asia. I felt that there was a lot of interest in the Earth Summit and in Agenda 21 and that significant action was being taken by governments.

Kiyohide Takeuchi, Japan Weather Association, JAPAN J077

•It is necessary to develop a system that encourages individuals to actively pursue issues contained in Agenda 21 and to establish educational programs that raise awareness levels.

Michio Hirose, OISCA, JAPAN J060

•I think that government and private volunteer organizations must intensify educational activities in their own spheres.  
Seiichi Yamashita, Wild Bird Society of Japan, JAPAN J055

•Agenda 21 is not hard science, but rather a general agreement on how to determine the feasibility of solving problems and how to deal with issues at an early stage. As such, it has a great deal of significance as a general statement on the direction in which humankind is headed, and its steady implementation is necessary.

Tomo Tsuchiya, Yamanashi Prefectural Office, JAPAN J035

•Industrially advanced nations, especially the United States and European countries, must take a fresh look at their economic activities since the Industrial Revolution. Although many parts of Asia, Central and South America and Africa may be behind industrially, these regions offer models of lifestyles harmonized with nature.

Yuji Kondo, Sasagawa Peace Foundation, JAPAN J033

•In Japan, the significance of Agenda 21 has not been adequately publicized in the press, and efforts by the government and NGOs to stress its importance have also been lacking.

Yukio Murata, WWF, JAPAN J011

•A domestic version of Agenda 21 was drawn up in Japan, but its contents are too abstract and do not offer any specific suggestions. It should have incorporated specific obligations on the part of government administrations and private corporations, but as it is its effectiveness is limited.

Yasutoshi Oka, The Institute of Global Environmental Culture, JAPAN J178

•I think Agenda 21 is extremely important, but because vague language and abstractions are used in the sections addressing the resolution of conflicts of interest between countries and the North-South conflict, it lacks effectiveness as a plan of action.

M, Japan Environment Corporation, JAPAN J113

•Agenda 21 can serve as a motivational goal for countries. Unfortunately, most people do not realize its importance because the slow progression of such environmental problems as global warming is not readily apparent to their senses and does not directly impact their daily lives. Making the general public aware of the importance of Agenda 21 will be very difficult.

M, Global Industrial and Social Progress Research Institute, JAPAN J103

## **2. Comments pertaining to question five, which concerns perceived inadequacies of Agenda 21**

•The way Agenda 21 will work will be determined by the commitment of the major energy-consuming countries. The success of Agenda 21 will depend on the real scene in the OECD countries.

M, Tata Energy Research Institute, INDIA 009

•There is no binding covenant or even more so a kind of superstate/world government which can make sure the Agenda 21 is implemented by all countries.

Tepa R. Suaesi, Department of Lands, Survey and Environment, WESTERN SAMOA 071

•Public education can be the other tool to help implement Agenda 21.

Ximena Abogabir, Casa de la Paz, CHILE 075

•Agenda 21 was concluded at the highest political level by 120 heads of state and government and cannot therefore be legally impotent or nonbinding.

M, Port Loko United Nations Students Association, SIERRA LEONE 225

•The UNCSD should be given more political power/weight, also to maintain and correct other international bodies.

F, Swiss League for Nature Protection, SWITZERLAND 248

•Agenda 21 is not an international convention. Countries had only a moral obligation to implement Agenda 21.

Alberto Lizarralde, Ministry of Foreign Affairs, VENEZUELA 251

•The efforts to establish an important group of international laws is quite slow.

Talia Vela Vargas, Proterra, PERU 297

•It is unfortunate that in its global warming policy Agenda 21 fails to responsibly address the issue of countries such as the United States that are still “developing countries” in terms of awareness of wasteful energy consumption.

Manami Fujikura, Kamakura City Office, JAPAN J171

•Although I think that it is extremely difficult to build up legal authority, it is necessary to begin, starting with the lowest level of regulations.

Jun Miki, Research Institute of Innovative Technology for the Earth, JAPAN J151

•I believe that Agenda 21 can be effective if those implementing it really want it to be so. To expect this kind of thing to have legal authority is unrealistic. (If it were legally binding, then it would not have come into being in the first place.)

M, Japan Environment Corporation JAPAN J113

•Agenda 21 does not include strict regulations, but even if it did would they be followed? The answer to this question depends on what general direction humankind is headed on these issues. If Agenda 21 cannot be carried out, then it will be necessary to institute rather strict regulations at the next stage.

Takashi Hirano, Global Environmental Forum, JAPAN J097

•When the next Earth Summit is held in five or ten years, Japan should become a leader in taking the next step, creating something along the lines of a treaty with legal authority.

Norio Tanaka, The Institute of Energy Economics, JAPAN J082

•Because human beings tend to be dishonest, legal authority in the form of international laws, etc., should be established and put into effect quickly.

M, Mie University, JAPAN J058

•If each country, based on an international honor system, prepares the necessary domestic laws, the effectiveness of Agenda 21 will be sufficiently guaranteed.

Shin Suzuki, Kushiro City Office, JAPAN J036

### **3. Comments pertaining to question six, which concerns the effectiveness of the United Nations Commission on Sustainable Development (UNCSD)**

•UNCSD will remain only a forum of discussion and a publishing house, without rendering any tangible contribution towards goals of Agenda 21, unless it is given powers to enforce environmental regulations and economic fair play.

M, Federal Government, PAKISTAN 006

•Until economic power is taken away from TNCs and their friendly G7 governments, there will be little change even from UN organizations.

M, Manly Greens, AUSTRALIA 034

•Unless it can take industrial processes of the North multinationals, which center on greed, and do something about them, it will not help!

F, Canadian Institute for Environmental Law and Policy, CANADA 081

•The short-term results are already known without assessments by UNCSD. We do not need warnings and more discussions. The world community is aware and informed enough already. UNCSD can only add more development theories to the large spectrum of academic discussions.

Teresa Z. Kief, GERMANY 104

•These commissions, regretfully, are not so active in developing countries and actually nobody knows them. Even for me, this is a new name; I had never heard about it before.

Hamid Taravaty, IRAN 109

•UNCSD will be very effective here in the country. We have already established a council —The Philippine Council for Sustainable Development —which monitors the implementation of a patterned “Philippine Agenda 21” into our existing Medium Term National Development Plan.

M, Environmental Mgt. Bureau, PHILIPPINES 190

•UNCSD is simply a follow-up mechanism. If countries do not honor commitments signed at Rio, UNCSD cannot force them to comply. Take the issues of financial resources and technology transfer—no progress at all.

M, UNEP, KENYA 199

•For South America it is very important to send UNCSD reports in the Spanish and Portuguese languages. Many people interested in UNCSD reports speak and read no English.

M, Fundacao Fauna e Flora Tropicais Rondonia, BRAZIL 242

•I hope to get information about the extent of implementation in other countries. We should establish general guidelines for firmly placing environmental conservation issues on the agenda.

Manami Fujikura, Kamakura City Office, JAPAN J171

•It is necessary to do everything possible to get the reports of the Commission to the general press so that the public will have access to them.

Yozo Takemura, The Energy Conservation Center, JAPAN J125

•I feel that if the UNCSD turns into a debate between North and South, it will never get anywhere.

M, Federation of Economic Organizations, JAPAN J107

•Whether the UNCSD will be effective or not is up to NGOs in each country—they must work hard and communicate with each other.

Akiko Domoto, Global Legislators Organization for a Balanced Environment, JAPAN J101

•Even if the UNCSD has not been able to take effective action so far, it is one of today’s best international organizations, and I do expect good results eventually.

M, Environmental Agency, JAPAN J091

•Because UN organizations lack the ability to attract popular support and many other complications continue, it seems that substantially raising the priority given to environmental problems will take some time.

Shoji Umeda, Clean Japan Center, JAPAN J041

•Without messing around with organizations, the effective application of existing mechanisms can also provide solutions.

Motoichi Ando, International Lakes and Marshes Environment Committee, JAPAN J008

#### **4. Comments pertaining to question seven, which concerns solutions to overpopulation**

•Limiting population growth can be achieved by increasing the general awareness and heightening women’s status in society. However, the energy consumption disparity which exists between the developed and the developing countries needs to be balanced.

M, Tata Ebergy Research Institute, INDIA 011

•Good education, fair standards of living and effective family planning are interrelated.

C. Rabevazaha-Rabekoriana, Association pour la Promotion de l’Entreprise à Madagascar, MADAGASCAR 015

•Priority for funding should be based on the local needs. Borrowed experiences of development from the developed nations are not relevant in developing countries.

M, BAIF Development Research Foundation, INDIA 017

•Overpopulation is not a global threat as such. The current problems come from the lifestyles of a minority of humankind.

Dr. Juan P. Ruiz, Departamento Ecologia, SPAIN 043

- For a developing country like Nicaragua, the most important thing is to educate people and in this case girls, because most mothers with big families are poorly educated and have no means to support themselves.  
F, Nicaraguan Foundation for Conservation and Development, NICARAGUA 070
- Educated couples voluntarily adopt family planning; hence, women's education in developing countries is a pragmatic solution to check high birthrates. The high-consumption lifestyles of developed countries should be discouraged in developing countries through mass media publicity. Per capita high-consumption lifestyles of affluent people are the major cause of reduction of national resources and high pollution of air, water and lands.  
M, Regional Consultant Thar desert-India/UNEP/WCU(IUCN)/FAO(Forestry)/UNDP etc., INDIA 139
- Families can be restricted only through economic growth and improving women's education, which leads to improved status.  
M, International Ocean Institute, MALTA 229
- All solutions to the problem of overpopulation must not lose sight of human dignity and a person's personal moral right to determine how he or she should form a family.  
F, LINGKOD TAO-KALIKASAN, PHILIPPINES 236
- Even in developed countries, people have done what they please and population increases have been pronounced. If longstanding traditions and cultural factors in developing countries are carefully considered, prohibitive policies are a waste of time. When food supplies are guaranteed, the status of women elevated and people's lives stabilized, the population problem will resolve itself.  
Ikuji Seko, International Lakes and Marshes Environment Committee, JAPAN J009
- The population dilemma is closely linked to environmental problems. The only solution is for every human being to think about the future of the earth and make appropriate family plans. For this the spread of education is crucial, an area in which Japan can do a lot to help.  
Takeshi Kaihatsu, Forest-Culture Association, JAPAN J028
- Given our limited natural resources, aiming for sustainable development will require the long-term enforcement of policies which have until now been treated rather lightly. Above all, education is key.  
Tomo Tsuchiya, Yamanashi Prefectural Office, JAPAN J035
- In dealing with the population problem, it is necessary not only to consider macro factors such as national population growth rates but also to attach importance to the viewpoints of individuals and families.  
M, Ichihara City Office, JAPAN J038
- Many so-called developed countries do not mince words in expressing opinions on population issues, demanding that less-developed countries lower their birthrates. However, in Japan, for example, many people view the falling birthrate negatively, afraid that it will have serious implications for the country's future. Thus we can see that human beings will often consider a problem from the viewpoint that best suits their aims at a given moment in time.  
Hiroyuki Kitamura, The Association for Environmental Conservation of the Seto Inland Sea, JAPAN J052
- I hope that people will follow their best instincts and help end poverty and discrimination; then conditions will improve.  
M, Sustainable Society Institute, JAPAN J057
- Until people stop believing that there are benefits to a lifestyle that includes having many children, this problem will not be resolved. Japan is a prime example of how to dramatically lower the birthrate through raising the rate of economic growth and living standards, expanding alternative forms of energy, and securing adequate food and water supplies.  
Daishichiro Sato, Japan Wildlife Research Center, JAPAN J073
- I think that we can hope to find solutions to the population problem through general policies, aid and cooperative efforts for women that target reproductive health issues.  
Akiko Domoto, Global Legislators Organization for a Balanced Environment, JAPAN J101
- Family planning is urgent and, to be truly effective, must be accompanied by education.  
M, Ministry of International Trade and Industry, JAPAN J111
- Certainly the population explosion in the Southern Hemisphere is a major issue, but we must not forget that the birth of one more person in, for example, Japan is equivalent to the addition of 100 people in the Southern Hemisphere in terms of resource depletion.  
Tomoyuki Iwamoto, Kyoto University, JAPAN J116



•To find solutions to the population dilemma, health and sanitation systems must be established and education brought up to acceptable standards all over the world. Methods such as restricting the number of births per family will not solve the problem.

Hideki Masamoto, Tokushima Prefectural Office, JAPAN J117

## **5. Comments pertaining to question eight, which concerns economic measures and regulations aimed at solving environmental problems**

•Private sector is profit-driven and will not sacrifice profit for the environment unless forced to do so.

M, SAIC, USA 046

•Human minds get motivated only when there is some advantage to be gained or a threat. However, threats as a motivation have limitations. But the potential for advantage as a factor behind motivation has a long-lasting effect.

Mr. Lsuresh P. Lakade, BAIF Development Research Foundation, INDIA 048

•I support the "polluters pay" principle.

F, HARIBON FOUNDATION, PHILIPPINES 067

•These measures only in developed countries are successful so far. The third world must shift more to ease restrictions on foreign investments and on industrial development and lean less on aid.

Dr. Horst R. Kief, GERMANY 105

•The country is being developed into an industrial state, and there is a need for strategies on technology and research. Aid (grants) needs to be aligned to environmental concerns as well as incentives offered to groups/companies doing self-monitoring activities.

M, Environmental Mgt. Bureau, PHILIPPINES 190

•An American export is economics expertise; but we have too few economists who value the good provided by healthy ecosystems, or the cost of environmental degradation.

F, Wildlife Preservation Trust International, USA 300

•Rather than establishing regulations and more bureaucracy, public organizations should first put their ideas directly into action themselves. For example, publicly funded organizations must introduce concern for the environment into their own activities. In addition, environmental education is necessary so that consumers can make environmental concerns a factor in their purchasing decisions.

M, Osaka Gas Co., Ltd., JAPAN J175

•I think a system that holds individuals responsible is necessary. In Japan, in particular, people will not take action unless there is a system of accountability.

Manami Fujikura, Kamakura City Office, JAPAN J171

•Regulations are necessary, but we must employ economic measures that will raise people's consciousness about the need to solve environmental problems.

Hidehiko Kishi, Friends of the Earth, JAPAN J146

•First of all, I think we should expand opportunities for ordinary citizens to participate in activities that benefit the environment, such as a system of return deposits on recyclable cans and bottles. Although the material results may not be large, we will gain much by raising the general awareness of the public. In addition, I feel that direct controls are necessary because self-regulation has its limits. At the same time, small and medium-sized businesses need to be regulated because they are less subject to public scrutiny than major corporations. I doubt the effectiveness of environmental taxes.

M, Global Industrial and Social Progress Research Institute, JAPAN J103

•It is necessary to come up with diverse measures and combinations of measures, such as return deposits on recyclable cans and bottles and taxes with environmental incentives.

Akiko Domoto, Global Legislators Organization for a Balanced Environment, JAPAN J101

•I think that it will be difficult to solve environmental problems that arise from the daily activities of companies and individuals (CO<sup>2</sup>, garbage, etc.) through regulatory measures alone. I believe that economic measures are essential.

M, Environment Agency, JAPAN J094

•We must make information available to the public, and we must create an atmosphere in which it is easy for ordinary citizens and public institutions to cooperate. In Japan, if these measures are not accompanied by strong regulations, then they will not amount to anything.

M, Honda Foundation, JAPAN J062

•We must establish environmental taxes that assign the burden of taxation according to the degree of damage done to the environment and, by finding special sources of revenue, expand the environmental budget.

M, Kushiro City Office, JAPAN J036

•Even if the number of cars that *do* comply with emission standards were to double, then the burden on the environment would increase. The legal regulations that have been in place up until now must be effectively complemented by economic measures.

Tomo Tsuchiya, Yamanashi Prefectural Office, JAPAN J035

•The establishment of emission standards for cars and factories has yielded results in cleaning up the atmosphere. I don't expect much from individuals and companies in the way of self-regulation, which leaves direct regulation as the only solution.

Takeshi Kaihatsu, Forest-Culture Association, JAPAN J028

## 6. Comments on related topics

### GENERAL COMMENTS

•Recently, developed countries have shown political willingness to act thus setting up innovative funding mechanisms, such as MPTF & GEF. But the multinational corporations of these countries are resisting transfer of environmentally sound technologies to developing countries due to commercial reasons.

M, Tata Energy Research Institute, INDIA 012

•I would like to be more effective in facilitating change. It is imperative that society transcends materialism and learns to live lightly on this planet we are privileged to call HOME!

F, Greengauge, AUSTRALIA 018

•Most developing nations' foresting for fuel leads to desertification, erosion, poverty, migration, etc. Environmental protection technologies (reforestation, recycling, land management, etc.) should be encouraged. Local NGOs need promotion.

M, CEPATA, GUINEA 027

•I am very sorry that after more than 30 years of freedom, Africa is still poor, our governments still thinking of their own pockets and stomachs. They never think of their population. What pains me is the disparity between English-speaking countries and French-speaking countries (not developed, without initiative or follower).

M, EDEN, TOGO 030

•While rating the "current state" in Q3, one feels as if things are deteriorating.

There is a dichotomy in the behavior of most governments; on the one hand they throw bits to ecofriendly projects, but on the other hand the lion's share of all sorts of resources are allocated to hostile industries and lifestyles.

Matters do not end with industries. In fact, education, culture, value-systems and mass media play the major role.

M, Anmedabad Study Action Group, INDIA 054

•The failures of UNCED are known. The fight for survival on earth is no longer taken as seriously as in 1992 in Rio. The demands of developing countries for aid have become excessive and cannot longer be met fully by the so-called rich countries.

Teresa Z. Kief, GERMANY 104

•Until producers pay the true price of oil, natural gas, water, etc., used in their processes (aluminum cans, for instance), consumers will not realize the environmental costs associated with a product. The best education for consumers is the kind that hits their wallets! A major push must also be made to encourage markets in recyclables. Also, renewable energy sources.

M, USA 204

•Create technology-transfer programs to enable advanced environmental technologies to be transferred to third world nations, including education and training exchange programs, which are focused on environmental issues.

M, INEL/DOE, USA 205

•Biodiversity loss is an irreversible process. We can develop technological fixes for most other environmental ills, often lacking only the political will or economic incentive to do so. But once a plant or animal species becomes extinct, it is gone forever. We now face a series of potential, and possibly already ongoing, extinction spasms unlike anything since the disappearance of the dinosaurs 65 million years ago.

M, The Environmental and Consumer Protection Foundation, INDIA 298

•Although I think we can expect science and technology to play a role, it seems that it will be necessary for people to have a change of heart. For example, people must learn to feel shame at riding in large automobiles and four-wheel-drive vehicles. Advances in the fields of religion, logic, literature and philosophy will probably be very important for the resolution of environmental problems.

Soki Oda, Worldwatch, JAPAN J183

•NGOs of many countries, including Japan, are working hard to preserve the environment. Funds have been set up for the global environment and other financial support is also available, but it just isn't enough yet. I think Japan must elevate its environment agency to the level of a ministry and raise its budget.

Yasutoshi Oka, The Institute of Global Environmental Culture, JAPAN J178

•We cannot find a solution to the global environmental problem through advances in science and technology alone. I believe that education programs and people-oriented policies that call for changes in lifestyles are crucial. Furthermore, I think that a single policy that will solve all of the world's problems does not exist. We must set about solving each small problem one by one.

Hisahiro Goto, Research Institute of Innovative Technology for the Earth, JAPAN J162

•We must expand our body of scientific knowledge regarding global warming and other global environmental problems. Why? Because we must have significant funds to put specific environmental measures into action, and we have to figure out how to apportion those funds most efficiently. It is important that we base these decisions on scientific findings.

Koji Yamamoto, Meteorological Agency, JAPAN J136

•If the current slump in the economy continues, all thoughts of the environment will vanish from corporate managers' short-term heads. It is important for young people to spread their common sense way of thinking. If we don't start taking environmental problems and our attitudes toward the environment more seriously through education and publicity programs, then everything will go downhill.

Yoza Takemura, The Energy Conservation Center, JAPAN J125

•In my comments in the last questionnaire, I said that the three Ps—pollution, poverty and population—were serious problems, and this has not changed. To solve these problems, education is very important, and it would be good if Japan were to lend substantive educational assistance to developing countries.

M, Ministry of International Trade and Industry, JAPAN J111

•I feel that from now on we must make a priority of preserving biological diversity and nature in general, both on a regional and a global scale.

Akiko Domoto, Global Legislators Organization for a Balanced Environment, JAPAN J101

•I think that individuals, not just companies or governments, must seriously think about the next generation. A lack of information is a major impeding factor, but I wish that people would raise their awareness levels and take the global environmental problem more personally before it is too late.

Kenko Minami, Rainforest Foundation, JAPAN J092

•Why is it that the general public doesn't have much to say on these issues and hasn't made judgments on what society should do? We should be debating these issues from the time we are children.

M, Honda Foundation, JAPAN J062

# IV. Questionnaire as distributed to respondents

## I. Questions regarding worldwide activities targeted at solving global environmental problems

1. Indicate with a time your concern about the survival prospects of humankind in light of the deterioration of the environment, taking into consideration the times and associated concern levels listed below.

0:01 – 3:00: Not concerned at all  
3:01 – 6:00: Slightly concerned

6:01 – 9:00: Quite concerned  
9:01 – 12:00: Extremely concerned

Your time  :

2. Lately, there is a growing consensus that we should change our overconsumption–throwaway lifestyle. How do you feel about adapting a more frugal lifestyle? Circle the appropriate response below.

(a) Already have adapted/Can adapt  
(b) Could adapt with difficulty

(c) Could adapt to some extent  
(d) Impossible to adapt

3. Since the Earth Summit held in Rio de Janeiro in June 1992, to what extent has progress been achieved in the areas described in (1) to (23) below? Also, indicate your level of satisfaction regarding the current state of these areas. For both sections, circle the best response from (a) to (e), considering the situation *in your own country only*.

	Extent of progress					Current state				
	No progress	Almost no progress	Cannot determine	Some progress	Significant progress	Completely inadequate	Quite inadequate	Cannot determine	Quite adequate	Completely adequate
(1) International cooperative efforts toward sustainable development in the developing countries	a	b	c	d	e	a	b	c	d	e
(2) Efforts to solve basic problems, such as poverty and overpopulation	a	b	c	d	e	a	b	c	d	e
(3) Efforts to alter lifestyles and consumption patterns	a	b	c	d	e	a	b	c	d	e
(4) Activities by local governments and citizens' groups	a	b	c	d	e	a	b	c	d	e
(5) Activities by nongovernmental organizations	a	b	c	d	e	a	b	c	d	e
(6) Environmental protection policies of the industrial sector	a	b	c	d	e	a	b	c	d	e
(7) Policies to counter global warming	a	b	c	d	e	a	b	c	d	e
(8) Policies to protect the ozone layer	a	b	c	d	e	a	b	c	d	e
(9) Policies to reduce acid rain	a	b	c	d	e	a	b	c	d	e
(10) Policies to conserve forests	a	b	c	d	e	a	b	c	d	e
(11) Policies to combat desertification	a	b	c	d	e	a	b	c	d	e
(12) Sustainable agricultural development and development of rural communities	a	b	c	d	e	a	b	c	d	e

(13) Policies to preserve the earth's biodiversity .....	<u>  a  b  c  d  e  </u>	<u>  a  b  c  d  e  </u>
(14) Policies to protect the oceans .....	<u>  a  b  c  d  e  </u>	<u>  a  b  c  d  e  </u>
(15) Policies to protect fresh water resources .....	<u>  a  b  c  d  e  </u>	<u>  a  b  c  d  e  </u>
(16) Policies for the disposal of hazardous wastes and substances .....	<u>  a  b  c  d  e  </u>	<u>  a  b  c  d  e  </u>
(17) Formation of recycling systems .....	<u>  a  b  c  d  e  </u>	<u>  a  b  c  d  e  </u>
(18) Science and technology's contributions toward solving environmental problems .....	<u>  a  b  c  d  e  </u>	<u>  a  b  c  d  e  </u>
(19) Efforts to transfer environmental-conservation technology .....	<u>  a  b  c  d  e  </u>	<u>  a  b  c  d  e  </u>
(20) Efforts to establish the necessary capital-creating mechanisms for the preservation of the environment .....	<u>  a  b  c  d  e  </u>	<u>  a  b  c  d  e  </u>
(21) Promotion of environmental education .....	<u>  a  b  c  d  e  </u>	<u>  a  b  c  d  e  </u>
(22) Introduction of government regulations to conserve the environment .....	<u>  a  b  c  d  e  </u>	<u>  a  b  c  d  e  </u>
(23) Changes to economic systems leading to greater conservation of the environment .....	<u>  a  b  c  d  e  </u>	<u>  a  b  c  d  e  </u>

4. How important are the items contained in Agenda 21? Please circle one of the following.

- (a) Extremely important as a plan for humanity to follow into the next century
- (b) Quite important
- (c) Not very important
- (d) Not important at all
- (e) Cannot comment

Comment:

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5. Agenda 21 has been criticized for being inadequate in certain areas. Please circle the response you feel is most appropriate to the following statements (A) to (C).

(A) "Agenda 21 contains little about the environmental effects of nuclear power."

- (a) Very accurate
- (b) Accurate to some extent
- (c) Not very accurate
- (d) Inaccurate
- (e) Cannot comment

(B) "Agenda 21 does not deal with the ways developing countries are affected by multinational companies and the conventions of international trade."

- (a) Very accurate
- (b) Accurate to some extent
- (c) Not very accurate
- (d) Inaccurate
- (e) Cannot comment

(C) "Implementation of Agenda 21 will be difficult as the items are not legally binding, and thus no one is obligated to obey its guidelines."

- (a) Very accurate
- (b) Accurate to some extent
- (c) Not very accurate
- (d) Inaccurate
- (e) Cannot comment

Comment:

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6. The United Nations Commission on Sustainable Development (UNCSD) was established in February 1993 to follow up on achievements made at the United Nations Conference on Environment and Development (UNCED) in 1992. How effective do you think UNCSD will be in the future?

- (a) Very effective
- (b) Somewhat effective
- (c) Not very effective
- (d) Not effective at all
- (e) Cannot comment

Comment:

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**II. Questions regarding the primary solutions to global environmental problems as adapted from the previous survey**

7. Among the many solutions to overpopulation, such as limiting population growth or expanding the world's capacity to accommodate people, which do you think should be given highest priority? Choose in order of priority the three best solutions from (a) to (h) below. Also, choose three solutions you think the developed countries and international organizations should promote in the developing countries.

- (a) Family planning (e.g., contraception, maternal and infant health programs)
- (b) Heighten women's status in society
- (c) Increase the general level of and the number of people receiving education in the developing countries
- (d) Restrict the number of children per family
- (e) Raise the rate of economic growth and standard of living in the developing countries
- (f) Correct the energy consumption disparity between developed and developing countries
- (g) Expand alternative forms of energy and secure adequate supplies of food and water
- (h) Other (Please specify)

High-priority solutions: 1st ( ) 2nd ( ) 3rd ( )

Solutions the developed countries and international organizations should promote: 1st ( ) 2nd ( ) 3rd ( )

Comment:

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8. From among the following economic measures and regulations aimed at solving environmental problems, which would be most effective *in your country*? Choose four, ranking them from one to four.

- (a) Regulations to limit industrial activities that harm the environment, e.g., emission controls
- (b) Self-imposed restrictions and self-monitoring by corporations and industry
- (c) An environment tax or levy system to tax corporations producing particular pollutants, such as carbon monoxide, and to charge for the amount of waste produced
- (d) Establishment of an emission permit system and a market where these permits can be traded
- (e) Financing to support the formulation of strategies for technological development
- (f) Provision of international technological aid
- (g) Abolishing aid programs that exacerbate environmental problems
- (h) Creation of financial incentives and tax-reducing mechanisms to encourage environmentally friendly activities
- (i) Introduction of discriminatory pricing that will lead to purchases of more environmentally friendly products
- (j) Creation of deposit refund and recycling programs
- (k) Regulations to limit the ways land can be utilized
- (l) Extension of the official information disclosure system
- (m) Other (Please specify)

1st ( ) 2nd ( ) 3rd ( ) 4th ( )

Comment:

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9. Feel free to write comments on any related topic.

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**Results of the Third Annual  
"Questionnaire on Environmental Problems and the Survival of Humankind"  
*Focus on Agenda 21***

**REPORT**

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