Analysis of Citizens' Priorities over Sustainable Development Goals in Japan: Evidence from a Questionnaire Survey

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Abstract

Discussions on the Post-2015 Development Agenda preceding the conclusion of 2030 Agenda for Sustainable Development in September 2015 have included the integration of Sustainable Development Goals (SDGs) into the Millennium Development Goals (MDGs) in order to cover broader sustainability issues suitable for both developed and developing countries. While there is growing interest in negotiations among policymakers surrounding 2030 Agenda for Sustainable Development, research efforts for understanding what citizens in different parts of the world really seek in life have been limited to a few prominent initiatives such as MY World 2015. Based on an analysis of a survey study (n=1,855), this study attempted to highlight citizens' needs and interests in Japan among key MDGs/SDGs under discussion at the international level. This study was designed to compare priorities among citizens over 15 years of age in Japan in 25 social areas, including the environment, employment, health and safety as well as more specific issues in the particular area of sustainability. The results of the study indicate that the issues with higher priority among Japanese citizens differ greatly from those originally perceived and addressed under the MDGs. There is relatively stronger interest in environmental issues and social resilience than in poverty or access to primary health care and safe water drinking in Japan. Regarding environmental issues, another noteworthy finding is that there is higher interest in global or regional environmental issues such as climate change and air pollution than in local environmental issues, such as waste management and soil contamination, that may impact directly upon people's daily lives. The results of the study suggest a need for additional processes and mechanisms to integrate local needs and interests beyond the one-size-fits-all approach. In the post-2015 period, local and regional goal setting may be required to meet specific local conditions, while it may also be necessary to introduce monitoring efforts to ensure consistency between global and local goals in the new period.

Key words: 2030 Agenda for Sustainable Development, Japan, Millennium Development Goals(MDGs), questionnaire survey, Sustainable Development Goals (SDGs)

1. Introduction

The setting of 2030 Agenda is a result of continuous negotiations that lasted several years. Rio+20 resulted in ongoing debates regarding the establishment of Sustainable Development Goals (SDGs). This change from the Millennium Development Goals (MDGs) to SDGs implies that the new goals will include global aspects of local environments, addressing the significance of future perspectives for all regions on the planet. As even state-of-the-art knowledge from science and academic research can barely grasp the whole picture of such development (Kates *et al*., 2001, Kates, 2011) and as sustainability often involves value judgments, participation of the general public in the goal-setting process is of critical importance (Schneider & Rist, 2014; Wiek *et al*., 2011). Nevertheless, research initiatives for understanding priorities of the general

public among various goals have been limited to a few studies such as the MY World 2015 survey (www.myworld2015.org/) conducted by the United Nations (UN). In addition, in the original version of the MDGs, target countries were limited to developing countries, while there were lively debates about participation of developed countries in the Post-2015 Development Agenda (Brito, 2012; Glaser, 2012; Horner, 2012; Sachs, 2012). There is a strong necessity, therefore, for research addressing MDG/SDG issues that concern citizens in developed countries, including Japan.

2. Background

2.1 From the MDGs to the Post-2015 Development Agenda

The MDGs were adopted in 2000 at the Millennium Summit under the strong leadership of Kofi Annan, Secretary-General of the UN at the time. Eight goals and twenty-one targets were set with the central goal of "eradicate[ing] extreme hunger and poverty." The date for achieving these goals and targets was set for the end of 2015. As the deadline has approached, international negotiations toward establishment of the Post-2015 Development Agenda have resulted in introducing of 2030 Agenda for Sustainable Development. In 2012 Rio+20 (the United Nations Conference on Sustainable Development) proposed establishing SDGs with a stronger focus on environmental issues. 2030 Agenda for Sustainable Development is the result of international debates towards integrating SDGs into the Post-2015 Development Agenda.

2.2 Criticism of the MDGs

There is a general understanding that the MDGs set in 2000 are highly valued for helping to reduce poverty and hunger. There have been some critical reflections on them as well, however. Firstly, although the goals are regarded as simply worded and easy to understand (Aryeetey *et al*., 2012; Attaran, 2005; Elliott, 2005; Fukuda-Parr & Greenstein, 2010; Higgins, 2013; Hulme & Fukuda-Parr, 2009; Langford, 2010; Toulmin & Gueye, 2003), there is criticism that setting goals in a "one-size-fits-all" format does not take into account the specific characteristics and circumstances of each country and region (Gauri, 2012; Gough & McGregor, 2004; Grown, 2005; Handoussa, 2009; Heeks, 2005; Miranda & Patel, 2005; Vandemoortele, 2012). There are opinions that along with setting universal goals, it would be necessary to provide explanations of these goals in consideration of local and regional contexts (Fukuda-Parr *et al*., 2014; Glaser, 2012; Gore, 2004; Grown, 2005; Melamed & Bergh, 2014; Nayyar, 2011; Nhema, 2010; Vandemoortele, 2005). In this regard, it is thought that the general public's priorities for MDGs would be connected with income, living environment, age and other specific attributes of individuals. Some are also of the strong opinion that it will be necessary to set targets reflecting these specific attributes side by side with the universal goals (Kanie *et al*., 2014; Nayyar, 2011; Nhema, 2010; Slay *et al*., 2013).

Another issue relating to the MDGs is that as the central goal was "eradicating extreme hunger and poverty," the main focus has been placed on developing countries. There are on-going debates that the post-2015 Development Agenda should focus more on developed countries as well (Evans & Steven, 2012; Jeremic & Sachs, 2014; Kanie *et al*., 2014; Lingan *et al*., 2012; Manning *et al*., 2013). Therefore, a better understanding is required about what concerns citizens of developed countries, including Japan, in order to incorporate issues that the MDGs have not previously addressed in the Post-2015 Development Agenda.

2.3 MY World 2015 Survey

MY World 2015 primarily consists of an online survey (www.myworld2015.org/) that examines the concerns of the general public about the post-2015 Development Agenda. The survey asks individuals to vote for issues that are most important to them among 16 suggested variants. According to the website, more than 7 million people have participated in the survey as of February 2015. Among the 16 suggested issues, the highest priority has been given to "good education" and "better healthcare" and the lowest to "action on climate change" and "phone and Internet access." Although new 2030 Agenda for Sustainable Development has been finally introduced, research initiatives for understanding concerns and interests among the general public have been limited to the MY World 2015 survey.

3. Research Design

The present study used a questionnaire survey (n=1,855) to ask the general public in Japan about their individual concerns and interests among 25 MDGs/SDGs-related issues. The survey was conducted over the Internet in February 2014. Specific attributes of each individual (gender, education level, income, marital status, number of children, living conditions and level of happiness) were examined to understand how individual attributes or circumstances were associated with the level of concern and interest in a specific MDG/SDG goal or issue.

The goals and issues used in the questionnaire survey were selected from 1) the MDGs, 2) reports of the Open Working Group established for preparing proposals for SDGs, 3) the report of the High-Level Panel submitted to the UN Secretary-General in the process of developing of the post-2015 MDGs, 4) the Sustainable Development Solutions Network (SDSN) Report on the post-2015 agenda, and 5) topics included in the Better Life Index Survey by the OECD. In particular, the survey adopts some of the goals and issues addressed in the Better Life Index Survey in order to incorporate concerns among citizens in developed countries.

The next section of this paper presents the public perception of the goals and issues within three separate

categories including 1) poverty, 2) health and 3) the environment. The questionnaire asked individuals about their first, second and third priority among the issues by posing the question, "What are the most important environmental (or poverty or health) issues for you? List in sequence the three most important issues." While this paper addresses the goals and issues within the three separate categories—poverty, health and environmental issues— the survey itself addressed other goals and issues related to, for example, education and food.

In addition to the goals and issues in the three separate categories, Section 5 of this paper presents the results of a survey eliciting issues with high priorities across the different categories. The results of the survey are correlated with specific attributes of individuals to gain a better understanding of the priorities of issues among different individuals.

4. Results

4.1 Poverty

The first goal of the MDGs, "to eradicate extreme hunger and poverty," expresses the spirit of the MDGs, recognizing the negative influences of hunger and poverty on development and economic activity. This spirit continues to be observed in the discussions to establish SDGs. At present, the first and the second goals of the SDGs are to eradicate poverty in all its forms, ending hunger everywhere on the planet, and to achieve food security and improved nutrition. It is presumed that while serious poverty issues do exist as a social problem among developed countries (for example, malnutrition and obesity), eliminating poverty is a higher priority in developing countries.

The survey undertaken in the present study represents the situation in Japan as a developed country and the results confirm that poverty is not a high priority among respondents in Japan. In the survey the respondents were asked what the most important poverty issues were for them. Seven multiple choice options were provided: "eliminating starvation," "providing nutritional foods necessary for growth and keeping healthy," "greatly improving the lives of people living in slums," "ensuring good employment," "ensuring income above a certain level," "providing necessary social security" and "minimizing the harm caused by disasters or conflicts." As shown in Fig. 1, "providing nutritional foods necessary for growth and keeping healthy" placed fifth and "eliminating starvation," sixth. The total percentages of respondents selecting "providing nutritional foods necessary for growth and keeping healthy" and "eliminating starvation" as their 1st to 3rd choices were 33.5% and 28.5%, respectively.

The main concerns among poverty-related issues were "providing necessary social security" (58.2%), "ensuring income above a certain level" (57.1%) and "ensuring good employment" (52.6%). These results indicate that what is recognized as poverty and what is considered to be connected to poverty may differ among different countries. This supports the argument that the targets and goals should be localized to match unique situations in each country or society.

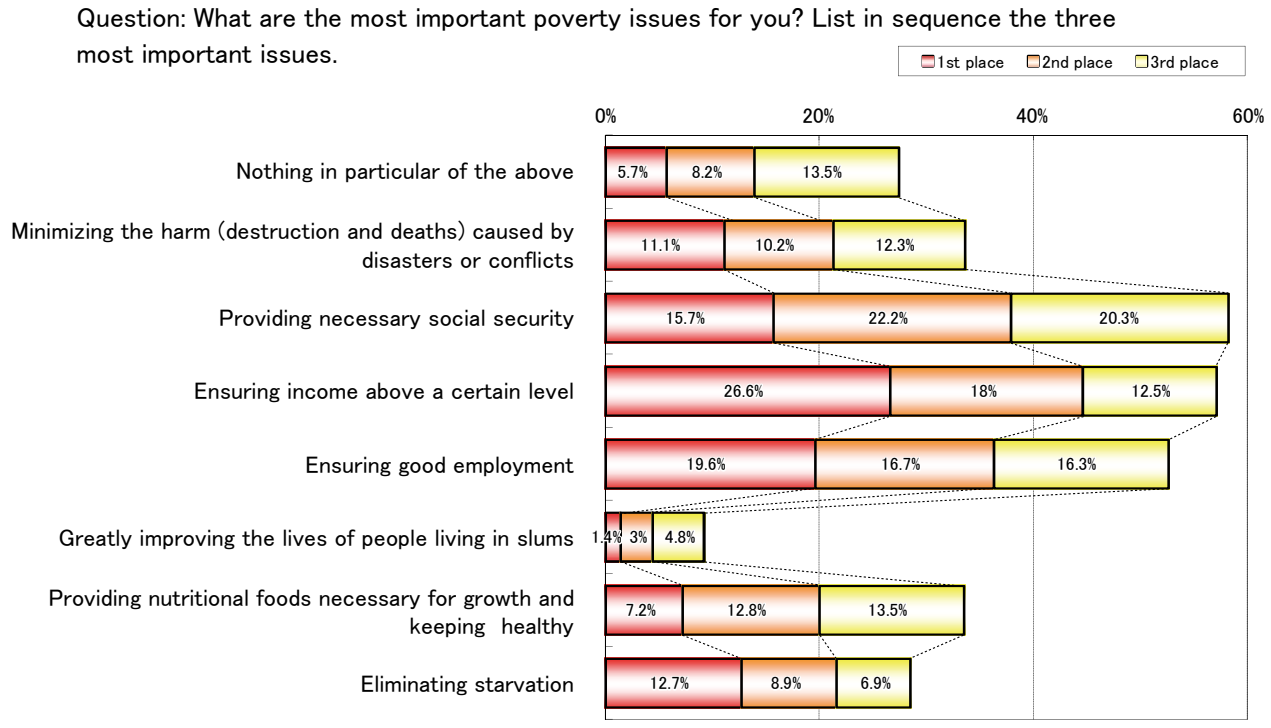

Fig.1 Distribution of public concerns over poverty-related issues (n=1,855).

4.2 Health

Compared to the MDGs health related goals, including to "reduce child mortality" (Goal 4), "improve maternal health" (Goal 5) and "combat HIV/ AIDS, malaria and other diseases" (Goal 6), the number of suggested options in our survey was relatively large (20 options for multiple selections). According to the results of the survey (Fig. 2), Concern among Japanese citizens toward the health issues addressed by the MDGs was extremely low. The results show that "reducing the mortality rate of children under five years of age" was ranked 14th out of 20 (5.0%), "reducing the mortality rate of expecting mothers," 17th (2.2%), and "preventing the spread of HIV and AIDS and ensuring a chance for medical treatment," 15th (3.6%). Instead, the majority of respondents prioritized "reducing psychological stress" (58.2%) and "exercising appropriately" (49.5%). The results may be representative of characteristics of lifestyles in a developed country such as Japan that lead to a lack of exercise and frequent stress.

Some MDG-related issues are of concern in Japan although they lack high priority. For example, in the case of poverty issues, choices such as "providing nutritional foods necessary for growth and keeping healthy" and "eliminating starvation" received high levels of support

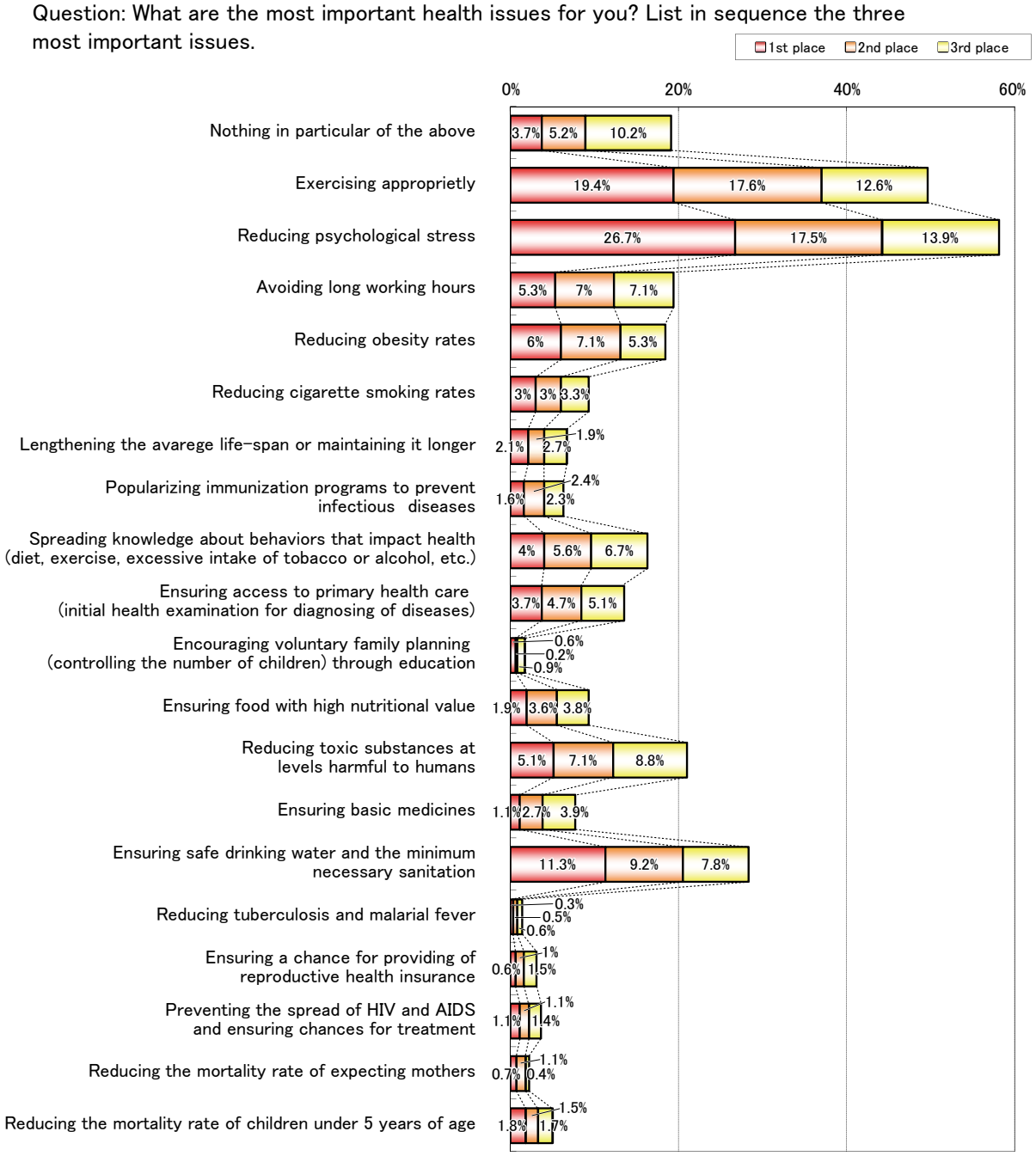

Fig.2 Distribution of public concern over health-related issues (n=1,855).

from respondents. In the case of health issues, "ensuring safe drinking water and minimum necessary sanitation" and "reducing toxic substances that are at harmful levels" received some attention among citizens in Japan.

4.3 Environment

The survey results indicate that there may be sharp differences in the types of concerns about environmental issues between developing and developed countries. According to the results (Fig. 3), among 20 choices, "air pollution" ranked first (44.5%) and "global warming" ranked second (43.5%). "Forest degradation" (24.2%), "water pollution" (23.5%) and "ozone layer depletion" (22.0%) followed. It is interesting that while the effects of air pollution and global warming may be considered relatively insignificant in Japan compared to in developing countries, both issues are of high concern to the Japanese public. In fact, these two issues elicited wider concern than issues directly linked to people's everyday life such as noise pollution, waste, soil contamination, land subsidence, the heat island phenomenon and violation of the right to sunlight.

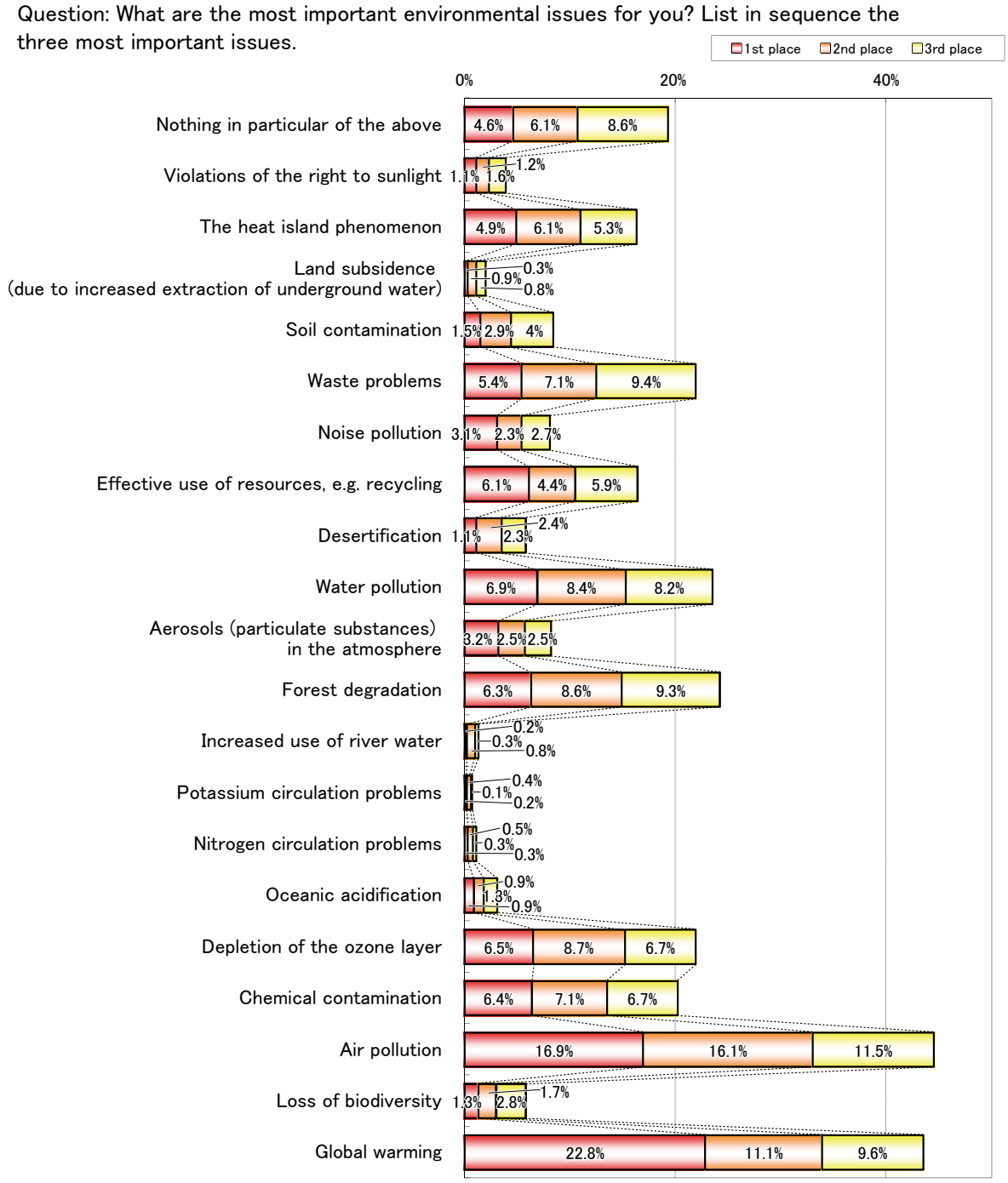

Fig.3 Distribution of public concern over environmental issues (n=1,855).

The results suggest that there are two broad types of issues. One type of issue is associated with direct impacts on one's own life such as social security (in the health category) and waste problems and soil contamination (in the environmental area). The second type of issues is linked to perceived risks over a mid- to long-term span such as global warming in the environmental area. Results from the MY World 2015 survey show that "action on climate change" is of lowest concern among respondents. By contrast, the results of the present survey in Japan demonstrate that mid-to long-term issues such as global warming are of high concern.

5. Understanding Issues with Higher Priorities across Different MDG/SDG-related Categories

In order to understand issues with higher priorities across different categories, this section addresses results of three additional analyses. Section 5.1 highlights issues that require improvement in individuals' present life in Japan. Section 5.2 examines the connections between respondents' choices of issues and their specific individual attributes to get a better understanding of the priorities of issues among different individuals. While Section 5.1 focuses on the sense of what is missing from the respondents' present lives, Section 5.3 looks into the future perspectives among individuals on different MDG/SDG-related issues.

5.1 Issues that Require Improvement in Life

To understand what issues individuals feel unsatisfied about in their current life and in what areas they feel they need improvement in life, the survey asked respondents, "What issues in your life require improvement? List in sequence the five most important problems." For this question, respondents had 25 answer options. Table 1 shows the results.

Among those related to financial aspects and family budgeting were "promoting good jobs" (33.3%) and "continuing economic growth" (27.1%). Some of the highest rated aspects were "promoting the introduction of sustainable energy" (29.5%), followed by "using limited resources effectively" (26.9%), "reducing air pollution" (25.1%) and "reducing greenhouse gases to prevent global warming" (24.2%), demonstrating higher levels of concern toward environmental issues. Social resilience issues were also reflected in the respondents' answers. Issues related to personal safety and security, such as "constructing a society that protects people from disasters" (28.0%) and "constructing a society where people can live safely with minimal crime and violence" (27.0%) were of high concern.

On the other hand, their level of concern about issues included among the existing MDGs was not high. "Eliminating extreme poverty" was ranked 12th (12.2%), "enabling everyone to get primary health care," 15th (11.5%); "ensuring access to safe drinking water," 17th (9.2%); and "preventing the spread of HIV and AIDS and reducing it," 24th (4.6%). These results show that it is important to incorporate issues central to developed countries in the process of rearranging the existing MDGs into the SDGs. At the same time, the essential task is how to associate the issues affecting developing countries with the concerns of people in developed countries.

Table 1 Distribution of public concern over issues that need solving in current life (n=1,855).

	Number of replies		Percentage of cases
	N	Percentage	
Q37[a]			
Promoting good jobs	618	7.8%	33.3%
Promoting the introduction of sustainable energy (e.g., renewable energy)	547	6.9%	29.5%
Constructing a society that protects people from disaster	519	6.6%	28.0%
Continuing economic growth	502	6.4%	27.1%
Constructing a society where people can live safely with minimum crime and violence	501	6.4%	27.0%
Using limited resources effectively	499	6.3%	26.9%
Reducing air pollution	466	5.9%	25.1%
Reducing greenhouse gases to prevent increases in globing warming rate	448	5.7%	24.2%
Reducing graft and corruption of public officials	414	5.3%	22.3%
Reducing the emissions of toxic substances	361	4.6%	19.5%
Practicing sustainable farming and fishing	263	3.3%	14.2%
Eliminating extreme poverty	227	2.9%	12.2%
Eliminating gender discrimination and building a society with equality	222	2.8%	12.0%
Eliminating discrimination by gender, religion, nationality and social status	219	2.8%	11.8%
Enabling everyone to get primary health care	214	2.7%	11.5%
Increasing agricultural productivity in a sustainable manner	185	2.3%	10.0%
Ensuring access to safe drinking water	171	2.2%	9.2%
Promoting infrastructure improvements (e.g., roads, telecommunications)	166	2.1%	8.9%
Providing access to foods that are safe and have a high nutritional value	160	2.0%	8.6%
Ensuring good sanitary conditions at home, school and work	147	1.9%	7.9%
Promoting aid to poor countries	145	1.8%	7.8%
Conserving biodiversity	137	1.7%	7.4%
Enabling all children to receive primary education	86	1.1%	4.6%
Preventing the spread of HIV and AIDS and reducing their incidence	85	1.1%	4.6%
Reducing child mortality rates	80	1.0%	4.3%
Nothing in particular of the above	497	6.3%	26.8%
Total	7879	100.0%	424.7%

5.2 Connections with Specific Attributes of Individuals

With the purpose of understanding the correlation between choices of issues and specific personal

attributes, this study conducted a logistic regression analysis for the ten top-ranked issues to the question "What are issues in your life that require improvement?" The results are summarized in Table 2.

The results indicate that the model shows no statistical significance for the four following options: disaster prevention measures, economic growth, crime reduction and corruption. In other words, these four issues were of concern to all respondents regardless of individual attributes. Therefore, these issues can be widely recognized as fundamental to society's effective operation or as social capital in a broad sense, rather than issues reflecting the views of individuals based on certain specific attributes.

In contrast, statistical significance was demonstrated for the connection of concerns about air pollution to respondents' lives in large cities and that of concerns about the use of resources, global warming and toxic substances to the respondents' level of happiness (concerns about toxic substances also appear related to the age and sex of the respondents). This indicates that these issues are of particularly high concern to respondents with certain specific attributes. For example, promotion of employment was found to be important to people with lower incomes and lower levels of happiness. This therefore demonstrates that employment is particularly important to individuals who may face poverty in their lives.

The results also suggest that among people who are in favor of introducing renewable energy, many are highly educated and relatively older. This can be interpreted as being connected with one's knowledge and position in society. Moreover, another important

Table 2 Individual attributes associated with the choices of issues: results of a logistic regression analysis.

	Promoting good jobs	Introducing renewable energy	Measures against disasters	Economic growth	Crime control	Effective use of resources	Air pollution	Global warming	Reducing corruption	Reducing toxic substances
	B	B	B	B	B	B	B	B	B	B
Age	– .031	.143 **	.104 *	– .010	.030	.042	.006	.088	.056	.126 *
Male	.038	.050	– .297 *	.091	.091	– .081	– .237	– .174	.029	– .463 **
Junior college/University	.090	.390 **	.221	.420 ***	.134	.121	.030	.137	– .046	.215
Income	– .228 **	.073	– .026	– .076	– .130	.003	– .015	.073	– .151	– .019
Single (not married)	.220	– .263	.124	.030	– .317	– .134	– .153	– .126	– .145	.180
Living with children	.048	.008	.150	.107	– .062	.101	.110	– .015	– .251	.169
Living in big cities	– .060	– .036	.094	.030	.180	– .089	.275 *	.162	– .137	.104
Level of happiness	– .111 ***	.000	– .019	– .027	– .023	.068 *	.051	.062 *	– .031	.071 *
Constant	.522	– 1.768 ***	– 1.320 ***	– .968 **	– .791 *	– 1.604	– 1.523 ***	– 2.095 ***	– .634	– 2.468
R2	.038	.035	.012	.013	.010	.014	.017	.018	.011	.024
$\chi 2$ (df=8)	44.620 ***	40.542 ***	13.408	14.877	11.329	15.891 *	18.423 *	19.971 *	12.193	24.588 **
N	1617	1617	1617	1617	1617	1617	1617	1617	1617	1617

*** p<.0001, ** p<.001, * p<.005

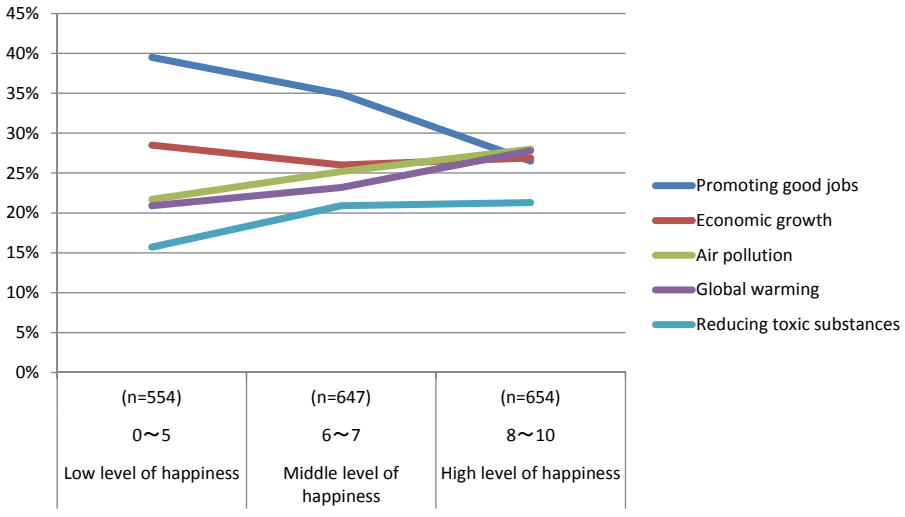

Fig.4 Influence of the level of happiness on concerns over problems that need solving in current life (n=1,855).

Table 3 Distribution of public concern about important issues in future life (n=1,855).

	Number of replies		Percentage of cases
	N	Percentage	
Q36[a]			
Constructing a society where people can live safely with minimum crime and violence	797	9.0%	43.0%
Using limited resources effectively	595	6.7%	32.1%
Constructing a society that protects people from disaster	571	6.4%	30.8%
Promoting the introduction of sustainable energy (e.g., renewable energy)	529	6.0%	28.5%
Promoting good jobs	521	5.9%	28.1%
Continuing economic growth	516	5.8%	27.8%
Reducing air pollution	516	5.8%	27.8%
Ensuring access to safe drinking water	496	5.6%	26.7%
Reducing greenhouse gases to prevent increases in globing warming rate	440	5.0%	23.7%
Enabling everyone to get primary health care	363	4.1%	19.6%
Ensuring good sanitary conditions at home, school and work	353	4.0%	19.0%
Reducing the emissions of toxic substances	344	3.9%	18.5%
Reducing graft and corruption of public officials	328	3.7%	17.7%
Practicing sustainable farming and fishing	299	3.4%	16.1%
Providing access to foods that are safe and have a high nutritional value	292	3.3%	15.7%
Eliminating extreme poverty	267	3.0%	14.4%
Increasing agricultural productivity in a sustainable manner	243	2.7%	13.1%
Enabling all children to receive primary education	227	2.6%	12.2%
Eliminating discrimination by gender, religion, nationality and social status	225	2.5%	12.1%
Eliminating gender discrimination and building a society with equality	202	2.3%	10.9%
Promoting infrastructure improvements (e.g., roads, telecommunications)	139	1.6%	7.5%
Reducing child mortality rates	126	1.4%	6.8%
Conserving biodiversity	117	1.3%	6.3%
Preventing the spread of HIV and AIDS and reducing their incidence	93	1.0%	5.0%
Promoting aid to poor countries	91	1.0%	4.9%
Nothing in particular of the above	182	2.1%	9.8%
Total	8872	100.0%	478.3%

finding was that with the exception of the introduction of renewable energy, all three environmental issues demonstrated a positive relationship to the respondent's level of happiness. Figure 4 illustrates how the level of concern about the five issues (three environmental issues, economic growth and promotion of employment) changed according to level of happiness.

As mentioned above, economic growth is a basis for social activity. It is recognized as important regardless of the level of happiness of the respondent. On the other hand, the opposite trend is seen between employment promotion and environmental issues with respect to the level of happiness: respondents with lower levels of happiness favoured promoting employment while those with higher levels of happiness were more concerned with measures for preventing environmental problems.

5.3 Important Issues for the Future

The analysis in Section 5.1 was based on responses to the question, "What issues in your current life need improvement? " The survey also asked respondents, "What will be the most important issues for you in your future life?" In the former question, the emphasis was placed on the sense of something missing from the respondent's present life. The latter question related to the respondent's future perspective. Table 3 lists the results.

As shown in Table 3, "constructing a society where people can live safely with minimum crime and violence" was ranked first (43.0%). Overall, issues related to safety and security ranked highly. In addition, "ensuring access to safe drinking water" (26.7%) and "enabling everyone to get primary health care" (19.6%) also ranked highly, while these choices were not of much concern when the question was asked about the respondent's present life. Issues of relatively high concern to developing countries indicate that responses may reflect not only the person's current condition but also prospects for the future. Answer choices may also reflect the person's normative values as to the future state of society and the direction of its development for the future.

6. Concluding Remarks

The results of the study indicate that issues rated of high concern by Japanese citizens differ greatly from those originally perceived and addressed under the MDGs. The results of this study suggest a need for additional processes and mechanisms to integrate local needs and interests beyond the one-size-fits-all approach. As mentioned in paragraph 55 of "Transforming our world: the Agenda for Sustainable Development" resolution, local and regional goal setting may be required for meeting specific local conditions, while introduction of monitoring efforts to ensure consistency between global and local goals may also be needed in the new period.

The results of this study indicate two areas for further research. The first area is to understand why the issues of higher priority among Japanese citizen differ so strongly from the issues originally addressed under the MDGs. As discussed in this paper, the reasons may be linked to the economic, social and cultural background of the country. The second area is to design local policies and institutions that match the unique local needs for a sustainable development agenda in Japan, some of which are addressed in this paper. With respect to this, the universal goals agreed to at the UN level must be translated into local targets that match the needs of local citizens in Japan.

Note

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