

## S5-2 Behavioural Change, example of Japan and China

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At the IPCC WG III AR4 SPM, p12, it reads “7. Changes in lifestyle and behaviour patterns can contribute to climate change mitigation across all sectors. Management practices can also have a positive role (*high agreement, medium evidence*) (SPM, p12)”. Clearly we need “the evidence” of the impact on climate change mitigation by the changes of lifestyles.

When talking about the “lifestyles”, everyone has his/her own definition of “lifestyles”. In this presentation, the “lifestyles” is defined as “changes of individual action” or “changes of lifestyle pattern”. Here, we focus on the “changes of individual action”.

First, we found that many people are still misunderstanding the causes and effects of climate change. Many people believe that the cause of climate change is air pollution, increasing traffic, depletion of ozone layer. Interestingly, Ozone layer depletion appears as the effect of climate change issues. Those misunderstandings might be barriers for changing attitudes.

Second, we show the changes of public concern on the environmental issue among various social issues from June 2005 to July 2009. First rapid increase of environmental concern occurred January 2007. This is because of 1) release of the movie “An inconvenient truth” in Japan, and 2) a series of releases of IPCC AR4 reports from late January to mid May of 2007. Those events have made mass media coverage on climate change issues increased, and then, people’s concern increased. Especially, front page of newspaper or airing time of news program is statistically significant with public concern. The peak of the mass media coverage is the summer of 2008, G8 Summit at

Toyako, Hokkaido, Japan was held. After the financial crisis after the summer of 2008, economic issues was paid attention by the public, but environment issues still positioned at second or third priority among many issues. Even in the severe economic condition, people’s concern for the climate change issue is quite high in Japan.

Third, using our survey research results of Japan and three Chinese cities such as Shanghai, Shenyang and Hong Kong, we found that Chinese people, except Hong Kong are very much optimistic about their surrounding current environmental states, and the role of the technological progress.

Fourth, using same survey results, we investigated the factors which are significant to the environmentally friendly behaviors. The result of logistic regression analysis, those factors such as information sources variables such as mass media exposure are significant in Japan, while personal network variables such as information from families, friends are significant in Shanghai. “Participation level of organizations” is the most significant variable in the analysis in both country/region.

In conclusion, for the changes of the lifestyle patterns, we have to know people’s values, attitudes and significant factors for people taking pro-environmental or anti-environmental behavior.

For further investigation, we need some strategies to consider. One is the mass media strategies, and communication strategies. Another is quantitative analysis of Carbon Dioxide emission change from people’s lifestyle change.