## 論文内容の要旨

With the growing threats of abrupt and irreversible change in Earth's atmosphere, stability and sustainability become two essential elements for the existent and continuation of human life on planet Earth. Simultaneously, humans are pursuing happiness as the ultimate goal of their lives, leading them to focus on the short term benefits without considering the long term harm caused to the Earth. Thus, the way individuals pursue happiness and behave in this situation should be explored to understand the relationship between happiness and the concern for the future and to suggest the appropriate mechanism or institution for considering future generations. To this purpose, this thesis applies survey and laboratory experiment and collect secondary data to examine the subjective happiness's determinants at the individual level, study the individual behavior in intergenerational sustainability dilemma situations, and find out the factors affecting the stability of public health provision as a significant determinant for the wellbeing of the society.

Our research starts with examining the relationships among happiness, the concern for the future generations i.e., generativity and social preferences, along with sociodemographic factors, within a single analytical framework. We hypothesize that generativity and social preferences are the determinants of happiness, posing a research question "Are people happier by being prosocial and/or generative for sustainability?" We conduct a survey experiment, collecting data from five subjective happiness scales, generativity, social value orientation and sociodemographic variables in one urban area (Dhaka) and two rural areas (Bogra and Gaibandha) in Bangladesh. With the data, we empirically characterize determinants of subjective happiness, focusing on generativity and social value orientation, controlling for sociodemographic factors. The statistical analysis consistently shows a positive association between subjective happiness and generativity, irrespective of the type of happiness scale, while social value orientation does not exhibit any significance. Rural residents have lower peer relative happiness than urban residents, and household income has a positive relationship with general subjective happiness, leading each of these factors to be significant in overall subjective happiness. In summary, generativity, income and residence area are main determinants of happiness, implying that further urbanization, which is expected to occur in the future, will positively affect people's happiness if it can bring about an increase in generativity. These results also suggest a possibility that people are happier by being more generative for sustainability, and some new institutional frameworks such as future design shall be recommended to enhance generativity.

In the second study, we examine the individual behaviors in the intergenerational sustainability dilemma (ISD), which is a situation of whether or not a person sacrifices her benefits for future sustainability. A one-person ISD game (ISDG) is instituted with a strategy method where individual's queue is organized as a generational sequence to examine individual behaviors. In ISDG, each individual chooses an unsustainable (or sustainable) option with her payoff of X(X - D) and an irreversible cost of D (zero cost) to future generations in 36 situations. Future ahead and back (FAB) mechanism is suggested as a resolution for ISD by taking the perspective of future generation whereby each individual is first asked to take the next generation's standpoint and request what she wants the current generation to choose, and, second, to make the actual decision from the original position. Results show that individuals choose the unsustainable option as previous generations do so or X/D is low (i.e., sustainability is endangered). However, FAB prevents individuals from choosing the unsustainable option in such endangered situations. Overall, the results suggest that some new institutions, such as FAB mechanisms, which induce people to take future generations' perspective, may be necessary to avoid intergenerational unsustainability, especially when intergenerational sustainability is highly endangered. In the third study, we study the determinant of the public health allocation's stability, which affects the quality of health service provided to the people in a society. However, little is known about the determinants of the public health allocation's fluctuations. Thus, this paper studies the determinants of sudden and big changes in the public health allocation (i.e., punctuation). We collect data from various sources such as the World Health Organization, The World Bank about the changes in the public health expenditure, governance indicators and the occurrence of natural and health disasters in 191 countries over the period from 1995 to 2015. Our results show that the least developed countries are more likely to face punctuation in the public health allocations than developed countries. We also find that countries with low governance indicators encounter more punctuations than countries with high governance index. Our findings suggest that instability in public health allocations could be resolved through providing international aids to the least developed and developing countries by

international organizations, which can be granted based on each country's governance ranking.