Public perception, adaptation and pro-social behavior toward climatic change and related natural disasters under deep uncertainty

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Faculty Members Involved in this Project

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1. Objective

This project is aimed at:

A research question, which can potentially influence the future of human society, is whether climate change is really occurring or not as well as whether it alters some basic life cycle of people in the world. On the basis of the evidence available up to now, scientists appear to have reached a consensus that climate change is occurring. Despite its importance, there have been few studies focusing on the effects of climate change on human behavior, such as pro-social behaviors, from a micro perspective. In that light, this project examines (1) how people perceive climate change, the occurrence of natural disasters such as extreme rainfall and cyclones, the related uncertainty and (2) how people adapt their behaviors to these changes. By doing this type of research, we can bridge the gap between human recognition and behaviors and real phenomena in climate and its related uncertainty, and suggest important implications for effective mitigation strategies based on this new evidence of micro-level human behaviors.

2. Project Outline

To that end, the project will consist of the following phases:

(a) Experiments and field surveys that collect the data related to human behaviors under climate change, disaster, related risk and uncertainty in the context of agriculture, natural resource and environmental management

(b) Collection of climate and natural disaster data

(c) Analysis of climate and human behavior data and development of theoretical models for possible explanations.

3. Expected Performance

In this project, the successful candidate would be expected to:

(a) Develop expertise in the design of experiments and field surveys.

(b) Deepen his/her knowledge and understanding of the behavioral sciences, economics, psychology and the intersection among these three fields.

(c) Analyze project data and develop some models to explain the phenomena observed in the field and experiments.

4. Required Skills and Knowledge

The successful candidate for this project will have the following knowledge and skills:

(a) Some training in calculus, probability and statistics

(b) Intermediate microeconomics

(c) Strong intellectual interest in one of the following fields: agriculture, natural resource management and environmental economics

References

Koji Kotani's website http://researchmap.jp/read0137216/?lang=english

See our admission guidelines:

http://www.kochi-tech.ac.jp/kut_E/graduate/admission.html

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