

## Gobeshona Rapporteur -Locally Led Adaptation Action in Japan-

Session Title:
Locally Led Adaptation Action in Japan
Session host/organizer:
Prof. Nobuo Mimura
Session speakers and their organizations:
Prof. Nobuo Mimura, Prof. ITO Tetsuji, Prof. Makoto Tamura (Ibaraki University, Japan)
Dr. Yoshifumi Masago (National Institute for Environmental Studies, Japan)
Prof. So Kazama (Tohoku University, Japan)
Dr. Motoki Nishimori (National Agriculture and Food Research Organization, Japan)
Dr. Akihiko Kotera (Vietnam Japan University, Vietnam)
Prof. Juan M. Pulhin (University of the Philippines, Philippines)
Speaker 1 <u>Prof.Nobuo Mimura</u> (three sentences - one on the issue, one on the
solution being discussed, and one on the speakers' main point):
1. Force of Natural disasters is apparently starting to overwhelm the society's protection capacity in Japan.

 New framework for adaptation to climate change (CC) has been developed at national level (Climate Change Adaptation Act in 2018 and NAP) and at regional and local level

such as actions of local government, private companies, communities, and residents.

3. There are barriers to promote locally led adaptation. They are gaps among local people, national and local governments, the role of local governments, formal and informal opportunities for education, and the role of the science community and institutions. It is important to share it among stakeholders to address these barriers.

Speaker 2 <u>Dr. Yoshifumi Masago</u> (three sentences - one on the issue, one on the solution being discussed, and one on the speakers' main point):

- 1. Limited resources (knowledge, experience, budget) of local stakeholders.
- 2. Sharing information and experience among local stakeholders across the country.



3. In Japan, Local Climate Change Adaptation Centers (LCCACs) are playing pivotal roles in local adaptation. To maximize the efficiency of limited resources of LCCACs, sharing information and experience among LCCACs with the support of national government/institutions is essential.

Speaker 3 <u>Prof. So Kazama</u> (three sentences - one on the issue, one on the solution being discussed, and one on the speakers' main point):

- 1. In the case of flood prevention, managements of local and central governments have complexity and conflict for the policies.
- 2. Capacity building and education can make the cooperated adaptation by not only governments but sectors.
- 3. Scientific and integrated analysis also can contribute to adjustment for different policies.

Speaker 4 <u>Prof. ITO Tetsuji</u> (three sentences - one on the issue, one on the solution being discussed, and one on the speakers' main point):

- 1. Lessons from town development resistant to flood damage in Japan from the perspective of humanities and social sciences.
- 2. How to change the structure of dialogue between the government and residents to be effective in hydraulic control project after the damage of a large typhoon.
- 3. Considering the role of interdisciplinary science from the perspective of humanities and social sciences through practice.

Speaker 5 <u>Dr. Motoki Nishimori</u> (three sentences - one on the issue, one on the solution being discussed, and one on the speakers' main point):

- 1. Agricultural adaptation researches in Japan to climate change impacts at multiple scales.
- 2. So far, climate adaptation, which is represented by countermeasures to unusual cool summer, were reasonably successful on the paddy rice cultivation in Japan. Because, the local communities for rice production integrated with administrative instructors, agricultural cooperation, and progressive farmers well functioned. From now on, however, such communities might be expected not to work due to the drastic aging of farmers and the inadequacy of local communities themselves.
- 3. Adaptation strategies to climate impacts on agriculture from incremental to transformative ones were described on the country and global scales. Besides, our



practices and activities for locally led adaptation in Japan and the Asian region were introduced.

Three key takeaways from the end of the session (from the session presider and Q&A):

- 1. Fill in the gap among climate science, policy, and local adaptation.
- 2. Strengthen and integrate international networking of universities and research institutions for catalyzing climate science, policies, and stakeholders.
- 3. Enhance "Co-understanding, Co-design, Co-action" for climate adaptation. Education for the younger generation in both formal and informal ways can be one of the drivers.

## Rapporteur summary (500-600 words):

Japan has been experiencing unprecedented effects of climate change such as extraordinary heavy rain events, very hot summers, impacts on human health, agriculture, fishery etc. To respond to today's and future threats, the Climate Change Adaptation Act was enacted in 2018, which focuses on the roles of local governments, private companies, communities and individual residents. Under this law, many activities started to promote the adaptation planning and implementation at local level.

From 2020, a S-18 research project which is entitled "Comprehensive Research on Projection of Climate Change Impacts and Evaluation of Adaptation" also started to generate broad scientific information to support the activities in wide areas in Japan.

In this session, speakers presented the situation ongoing in Japan including the CC Adaptation Act, adaptation planning of local governments, new flood control policy, local actions for early warning, evacuation and damage recovery, farmers improved practices, and connection of research and these activities.

The major discussion after 5 speakers was as follows: 1) The progress and barriers for local adaptation to fill in the gap between science, policy and action; 2) Role of scientists, government and local municipalities, and stakeholders. Both horizontal and vertical collaboration should be implemented; 3) Education for the younger generation. Education programs for sustainability and climate sciences in Ibaraki University and Vietnam-Japan University were introduced as some examples; 4) We should strengthen and integrate international networking of universities and research institutions for catalyzing climate science, policies, and stakeholders. These efforts can be the driver for enhancing "Co-understanding, Co-design, Co-action" for climate adaptation.

## Audience comments in Q&A and Chat Boxes

- 1. What is the lesson for Educational integration for the younger generation based on these adaptation experiences? Prof. JV, India
- 2. Thanks. Is there any focus in non Formal and Informal Education formats also > Prof JV



- 3. Thanks for a useful sharing of wisdom from countries. Just to share an important document for all .Tbilsi Declarations, 1977 UNESCO Intergovernmental Conference on Environmental Education organised by UNESCO in co-operation with UNEP Tbilisi (USSR) 14 26 October 1977 https://www.gdrc.org/uem/ee/tbilisi.html All the Best. Eco Sense is Cost Free. ProfJV, India e mail: jagsiobbindia@gmail.com
- 4. Thanks. There is so much of Science for Society needs in Climate Adaptation case studies presented at Ibaraki. Prof JV, Mysuru,India and Participant on Lakes Conferece at Tsuchira (Kasumigaura?) and Tsukuba in 1995 and 2018. Coordinator, People Science Forum, www.oeliusob.com, e-mail jagsiobbindia@gmail.com

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Rapporteur name: Makoto Tamura and Sayaka Yoshikawa (GLEC, Ibaraki university)