Research on farmers' awareness of adaptation to climate change and its information collection and sharing in rural area in Thailand

*Kyoko Matsumoto¹, Mallika Srisutham², Supranee Sritumboon³, Sompratana Ritphring⁴, Masashi Kiguchi¹, Taikan Oki⁵

1. Institute of Industrial Science, The University of Tokyo, 2. Faculty of Agriculture, Khonkaen University, 3. Land Development Department, 4. Faculty of Engineering, Kasetsart University, 5. Institute for Future Initiatives, The University of Tokyo

This research was conducted to clarify farmers' awareness of adaptation to climate change and its information collection and sharing in rural area in Thailand. Data were collected using face to face questionnaire survey from a total sample of 50 farmers in Khon Kaen province. The questionnaire was developed based on the semi-structured interview which was conducted in Songkhla province to extract components of questionnaire on perception, information collection and sharing of climate change and adaptation using previous studies. The data from questionnaires were collected in 2018. The attributes of respondents were fifties (34.0%) and sixties (30.0%), farmers (100%), Buddhism (100%) and natives of the study area (62.0%) have higher proportions.

It was found that 100% of respondents answered that they perceived local climate change, and 78.0% of respondents answered that their lifestyles were affected by climate change. Nevertheless, 92.0% of respondents answered that "I do not have willingness to adapt to climate change" and "I cannot decide whether I will take adaptation measures or not" from a long-term perspective. The proportion of respondents who perceive that lifestyles have been changed by climate change or natural disaster is high. However, even if the frequency of natural disaster increase, those who have willingness to do adaptation is less than half of respondents. Those who "undecided to take adaptation" have potential to take adaptation by providing appropriate information on adaptation.

Moreover, we found that 96.0% of respondents got climate information from TV. Next to TV, the percentage of respondents are high in the order of local wisdom based on their own experiences (58.0%), neighborhood (54.0%), radio (40.0%), SNS (Social Network Services) (24.0%), public speaker (18.0%) and TMD Smart Simulation (4.0%) which is weather forecast application at current location provided by Thai Meteorological Department (TMD). Regarding reliability of information resources, the highest percentage of "very reliable" and "reliable" information sources are TV (100%) (n=48), radio (100%) (n=20), public speakers (100%) (n=9) and TMD Smart Simulation (100%) (n=2). Next to neighborhood (96.3%) (n=27), SNS (91.7%) (n=12), local wisdom (82.8%) (n=29). Here it can be seen that it is necessary to make climate information spread from various sources.

Keywords: Adaptation to climate change, People's awareness, Collecting and sharing climate information, Thailand, Rural area