Tropentag, September 17-19, 2018, Ghent

"Global food security and food safety:
The role of universities"

Local Adaptation Mechanisms to Address Climate Led Food Insecurity in Far-Western Nepal: The Case of Badimalika Municipality

Deepak Chaulagain, Parshu Ram Rimal

Tribhuvan University, Environmental Science, Nepal

Abstract

The study was carried out to understand the food security situation and coping mechanisms due to an effect of climate change on food security of Badimalika Municipality of Bajura district in the far-western region; an acute food deficit district of Nepal. Literature review, household questionnaire survey to document primary data, stakeholders' consultation with field observations were the principle methods applied to explore the possible adaptation measures for securing food and livelihood of people. The research revealed that the district is food insecure for at least six to nine months of a year which is worsened by climate induced natural disasters: flood, landslides and drought. Sudden and unpredictable precipitation both in winter and monsoon has distorted the productions over the years. Considerable proportions of grazing land and forested area have been converted into farmland especially in the highlands. Migrating working class manpower to India to seek livelihoods is a menace to development in the place while seasonal migration in and outside the country is an interesting adaptive mechanism in the district. Drought resistant crop varieties such as finger millet (*Elusine coracana*), foxtail millet *(Setaria italic*), wheat (*Triticum aestivum*), and amaranth (*Amaranthus* sp.) are highly potential cereal crops that need to be promoted. Some humanitarian agencies with the support of the government of Nepal have been playing an important role in reducing the impact of food deficiency in the region. National food corporation district office supplies the deficit quantity of food to the people. The government needs to make agriculture the highest priority with increased investment schemes to avert the looming food crisis with emphasis to further research based activities through understanding the impact of climate change on specific crops and respective technological interventions, incorporating local adaptation mechanisms for disasters and climate change. Slow-forming terraces, conservation tillage, crop diversification, selection and promotion of drought-resistant varieties of crops, ecological pest management, seed and grain storages etc. are some technological innovations to be considered for enhancing food security.

Keywords: Adaptation, climate change, food security, interventions, migration

Contact Address: Deepak Chaulagain, Tribhuvan University, Environmental Science, Jadibuti, 00977 Kathmandu, Nepal, e-mail: chaulagaindeepu11@gmail.com