Impact of Climate Change on Agricultural Production in North-West Cambodia

Socheat Keo

Czech University of Life Sciences Prague, Tropical AgriSciences, Czech Republic

Abstract

In Cambodia, agriculture plays a main role to ensure food security and contribute to economic growth. Currently, this sector is strongly impacted by natural disasters (drought, flood and increasing insect pests and diseases) caused by climate change influencing farmer livelihoods. Therefore, this research was conducted to investigate farmer’s agricultural practices, determine the impact of climate change on these practices, and to know how farmers adapt to climate change. 180 farmer households were selected to do individual interviews. Of 180 households, 90 households were defined as poor (ID poor) by Ministry of Planning and 90 households were common farmers. Semi-structured interviews were conducted with key main informants such as district governor, chief of commune, commune council and chief of village. The results demonstrated that both types of farmers mainly depend on rice cultivation in wet season. Most of the farmers use conventional practices and some farmers still use traditional agriculture equipments and animals (cow) in their rice production. Almost all the farmers use direct-seeding technique in growing rice. Because of the natural disasters, farmers don’t want to invest money in agriculture production. The natural disasters (drought and flood) and insect pests destroyed rice production every year since 2010. To adapt to current climate change situation, half of the interviewed farmers have changed their rice varieties. Some farmers dig small ditches to mitigate the drought and flood and nearly half of interviewed farmers allow their family members to migrate to find a job in order to earn money for supporting daily livelihood and for starting up agriculture production again next year.

Keywords: Adaptation, agriculture production, climate change, poor farmer

Contact Address: Socheat Keo, Czech University of Life Sciences Prague, Tropical AgriSciences, 694 Prague, Czech Republic, e-mail: lucky_cheat@yahoo.com