

# VULNERABILITY AND ADAPTIVE CAPACITY TO CLIMATE CHANGE OF THE GUAGUA AND CANDABA COMMUNITIES IN CENTRAL LUZON, PHILIPPINES

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Candaba and Guagua are among the 21 towns and two (2) cities that comprise the province of Pampanga which is in the heart of Central Luzon, Philippines. Pampanga is the capital of the region composed of seven (7) provinces. It is considered the regional seat of government in the northern part of the Philippines. Guagua and Candaba are flood-prone communities due to their topography. Candaba represents the lowest point in Central Luzon while Guagua is just a meter (1m) above sea level. Guagua is traversed by several creeks and tributaries, which during rainy days, collect and convey floodwater to the Guagua river which goes to the Pampanga Bay (part of Manila Bay). Their area has been aggravated by the Mt. Pinatubo eruption in 1991 which make them highly vulnerable to climate change. Fishing and rice farming are the dominant occupations related to agriculture in the two municipalities. The Candaba swamp (now only 72 hectares from its original area of 32,000 hectares) serves a home to migrant wild ducks and various birds that escape winter winds from China and Siberia making it as their yearly sanctuary (a favorite tourist attraction for Filipinos and foreigners).

This study specifically aimed to identify the pattern of climate variability that affected the study sites and assess its social and economic impacts, determine the adaptation strategies to the observed climate change related events employed by the municipal local government units (LGUs) and their constituents, and propose measures to enhance the adaptive capacity of the affected sectors and stakeholders. The necessary data were collected through community consultations, key informant interviews and focus group discussion.

The climate change related events observed both in Candaba and Guagua are delay on the onset of rainy season, early onset of rainy season, drought and continuous or prolonged rain resulting to floods which mostly affected the agriculture and fishery sectors. Continuous rain is the most harmful or destructive climate change related event as its adverse impact on all identified most vulnerable groups or sectors is considerably large. Agriculture is the most vulnerable sector followed by the group of students, HHs, LGU, transport service and fishery.

*Key Words:* Climate Change, Vulnerability, Adaptive Capacity.

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