Impacts of Environmental Changes on Expanding Food-Health Risks in Asia

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Abstract: Increasing ecological risks and greater impacts of climate change are among the most serious threats to Southeast Asian countries. High economic growth, population increase, industrialization and rapid urbanization have been occurring in the region, which are not only affecting the vulnerability of natural and socioeconomic systems, but also affecting food and health security of the people. In addition, increased human settlements, agricultural activities, and industrial development, ecological risks have caused significant impacts on agricultural, food and water supply on which public health heavily depends.

Food and health risks, which result from both inadequate supply as well as poor quality of food and water, are contributing significantly to the public health conditions. This problem is worsened by reported impacts of a changing climate felt directly by farmers, rural and urban dwellers, often characterized by increased flooding, landslides and drought. The monsoon Asian region is often experiencing flood disasters, following typhoons, or heavy monsoon rains leading to heavy casualties and grave public health issues due to the spread of diseases and submersion and also aggravated by resulting food security problems. Authors will examine and assess the risks to human health associated with the exposure to heavy metals bioaccumulation in fish products from Laguna Lake. Anthropogenic activities continuously increase the amount of heavy metals in the environment, especially in aquatic ecosystem.

The major sources of contamination in surface waters can be traced to industrial discharges, domestic waste disposal and application of agrochemicals on farmlands. Environmental degradation affects the ability of coupled ecological and social systems to provide critical services that are directly linked to human being. It is considered to be particularly important because the poorest of the poor are dependent on the natural environment for their daily sustenance that is rapidly being eroded by factors such as urban developments, rapid expansion of the population and other economic factors.

Key words: Food insecurity, food safety, environmental degradation, bioaccumulation of heavy metals, laguna de bay.