

## B-10 Impact and Adaptation on Asia-Pacific Regional Population to Global Warming

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- (1) Since global warming should have a potential increase heat stress in hot summer, various effects caused by heat stress has been studied in China and Japan. The incidence of pneumonia and cerebral ischemia on emergency transported cases in Tokyo during the summer months, increased according to hot temperature in summer. Heat stress developed degeneration in various tissues and intracellular components. Therefore, global warming may have profound impacts on infectious diseases and circulatory systems during heat stress in hot summer.
- (2) Global warming may change the patterns of rainfall and temperature, therefore the prevalence of vector-borne diseases will change. The field survey of Dengue fever showed that the incidence of the disease correlated with the local climate and water resources. The distribution of Aedes aegypti and Aedes albopictus inhabiting in urban and rural area in southern China and Thailand is depending on the infrastructure of the residential areas and climatic pattern.
- (3) Using mortality data in Thailand and Japan, the relationship between the number of death and the temperature in summer has been analyzed. The mortality correlated to the seasonal temperature, living condition and the life style. The residents living in cold areas were resistant to cold weather, whereas the residents living in hot areas were resistant to hot weather.