

Future Water Stress under a Warming Climate over the Indochina Peninsula Future Water Stress under a Warming Climate over the Indochina Peninsula

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We focused to estimate water stress over the Indochina Peninsula. Trends in the total population under high water stress now and in the future (we call this total HWSP) and the population exposed to high water stress in the future but not now (we call this add-HWSP) are dependent on differences in each scenario, not the temperature increase. We indicated the sensitivities of climate change, water withdrawal, and population growth on total HWSP and add-HWSP to separate the influences of climate change and socio-economic change. Climate change and socio-economic factors (water withdrawal and population growth) decreased and increased add-HWSP, respectively. Because these factors are related to anthropogenic activities, it is necessary to consider the change in water withdrawal and population when we discuss how to avoid high water stress in the future.

Keywords: SRES, IPCC, uncertainty, water stress assessment