

VULNERABILITY ASSESSMENT TO CLIMATE CHANGE FOR AQUACULTURE IN MEKONG DELTA AREA

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Summary

There are currently no standard methods for vulnerability assessment for the effects of climate change in general, therefore, different scientific communities follow different approaches and given sub-indices. In this research, the system of sub-index components in vulnerability assessment was identified through the analysis of influential factors from external and internal systems, combined with the determination of the main components of vulnerability index via the approach of IPCC (2001). Spatial approach for vulnerable assessment through the analytical applications of GIS based on the foundation of component maps which are established from multi-source format is an effective method of quantifying the index components. Raster data format with 30x30 m resolution was converted to analyse and calculate for multi-dimensional indices (including index of exposure, sensitive and adaptive capacity) with the integration of weighted factors. The results of vulnerability index and their sub-components are to improve mitigation and adaptive capacities and minimize the negative impacts and losses resulting from adverse effects of climate change in the aquaculture in the Mekong river delta.

Keywords: *Spatial approach, vulnerability assessment, climate change.*