



Integrated Vulnerability Assessment: A Decision Tool for Water Scarcity in Small Islands

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Abstract

Water scarcity especially in the small islands in Indonesia had caused troubles for society in maintaining their water needs. There are a lot of instruments developed to measure community vulnerability index, however the majority are partially designed so that they do not reflect the overall condition. Therefore, this research will formulate a vulnerability index of water fulfillment in small islands using a comprehensive method so that the result can be used as a reference in policy making. This research applied a deductive-positivist approach of the quantitative method. It started of with the dimensions of vulnerability, that are: exposure, adaptive capacity, and sensitivity, which then operationalized into indicator/parameter of indexes to measure a vulnerable condition. The result shows that this vulnerability index can be utilized as a basis for policy decision making by considering the attributes that had been proved sustainable. Other than that, to reduce vulnerability in small islands, there is a need for a policy that considers community capacity and their adaptive patterns that could improve their social and economic capital.

Keywords: vulnerability index; small islands; fresh water; adaptation; social capital; sustainability.

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