

Insurance Fund as an Adaptation Measure for Increasing Water Security in Basins Under Change

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INTRODUCTION

Extreme weather events are increasingly evident and widespread around the world due to climate change. These events are driven by rising temperatures and changes in precipitation patterns, which lead to changes in flood frequency, drought and water availability. To reduce the future impacts of natural disasters, it is crucial to understand the spatiotemporal variability of social, economic and environmental vulnerabilities related to natural disasters.

Particularly, developing countries are more vulnerable to climate risks due to their greater economic dependence on climate-sensitive primary activities, infrastructure, finance and other factors that undermine successful adaptation. In this concept, **adaptation plays the role of anticipating the adverse effects of climate change and taking appropriate measures to prevent or minimize the damage they may cause.**

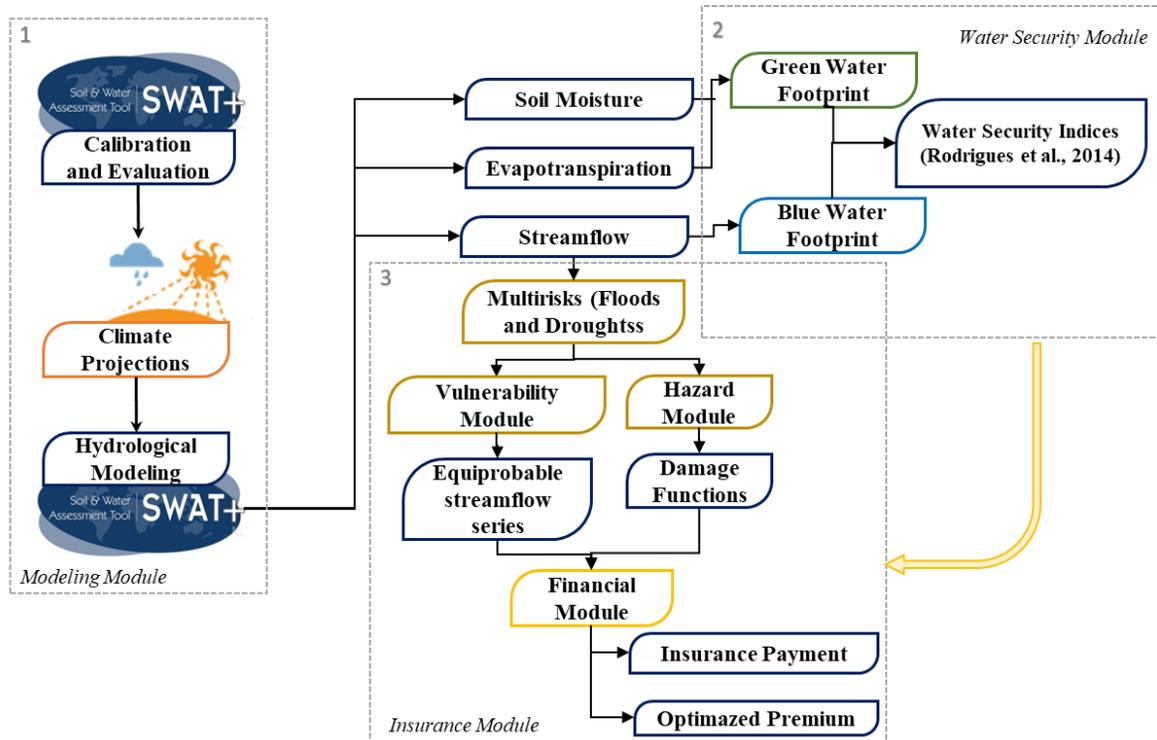
Thus, the **insurance fund is a valuable adaptation tool for unexpected losses reimbursement, long-term impacts prevention and encouraging risk mitigation.**

STUDY AREA



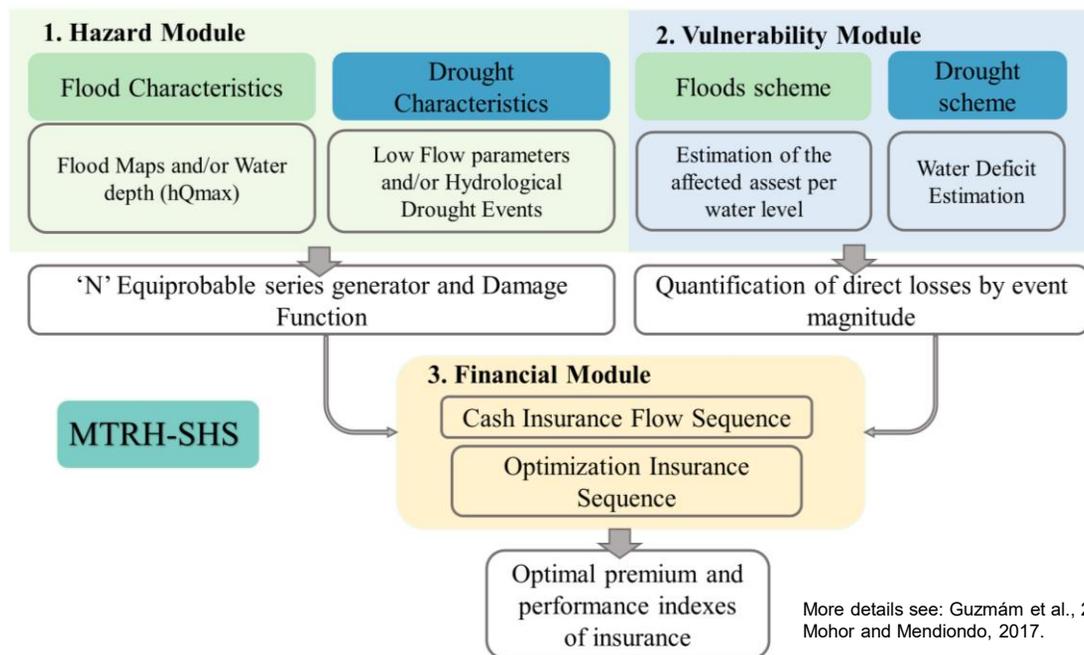
We will evaluate the implementation of an indexed **multi-risk insurance fund** integrated with water security parameters, **as an instrument for adaptation to climate change**

STUDY DELINIATION



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HYDROLOGIC RISK TRANSFER MODEL - MTRH



EXPECTED RESULTS

- Our results will provide an Optimized premium in current and future scenarios for supporting adaptation plans to climate change based on the application of the multi-risk index-based insurance fund incorporated to water security indices.
- We will indicate how each basin is economically affected by climate change and the relationships between extreme events and economic losses
- A technical-scientific information addressing possible effects of climate change on the hydrometeorological variables and their spatiotemporal variability

ACKNOWLEDGEMENTS

This study is supported by grants: P.h.D grant from the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior – Brazil – CAPES; CAPES PROEX 1650/2017/23038.013525/2017-3; CAPES 24/2014, Pró-Alertas 88887.091743/2014-01, CEPED–USP/NAP; CNPq 465501/2014-1, FAPESP 2014/50848-9 INCT-II Mudanças Climáticas; CNPq 312056/2016-8, EESCUSP/CEMADEN/MCTIC; FAPESP CEPID-CeMEAI 2013/07375-0, Fase II

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