RENEWABLE ENERGY AS A MEANS TO REDUCE THE VULNERABILITY OF SMALL COMMUNITIES FACING THE CLIMATE CHANGE EFFECTS

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The absence of adaptive capacities of vulnerable communities to climate impacts occurs by the lack of institutional actions in the respective region. The critical services such as radio communication, water supply, fuel supply, hospital services, etc., may be altered by power outages, or blackouts, due to extreme weather events. Therefore, in such situations, the electrical energy required to maintain these critical services, and reduce the impacts of floods, can be generated by alternative energy sources. In this work, the vulnerability analysis of a locality in Veracruz, Mexico, as a particular case, is shown, and the use of renewable energies is proposed to improve their adaptive capacities. To do this, an adaptive capacity analysis methodology is developed and then it is explained how decentralized renewable energy should reduce of vulnerability of this community.

Keywords: Adaptation, Vulnerability, Climate change, Renewable energy.