

Nexus between Water, Energy Poverty and Food safety, in urban areas of a developing country: Colombian case.

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Abstract

According to the Sustainable Development Goals (SDGs) put forth by the United Nations (UN), the main challenges facing humanity approaching to the year 2030 are as follows: no poverty; zero hunger; clean water and sanitation; affordable and clean energy; and climate action among others (United Nations, 2015). To achieve these goals is necessary to know the Nexus between Water, Energy and Food known in the literature as WEF Nexus. This paper attempts to establish relationships between Water (sanitation and potable water), Energy (modern cooking fuels), and Food (food scarcity). The results are based on The Quality of Life National Survey (QLNS) collected by the National Administrative Department of Statistics (DANE, 2017).

The proposal methodology is presented in the Figure 1, related to WEF Urban Nexus. This approach seeks responses between unilateral and mutual relationships. The mutual relationship includes: Water (potable water and sanitation); Energy Poverty (cooking fuels and electricity access); and Food Security (food scarcity). The unilateral relationships are focused between: water and income; energy poverty and income; and food security and income. The methods applied in this paper are based on statistical relationships in low income, middle income and high income.

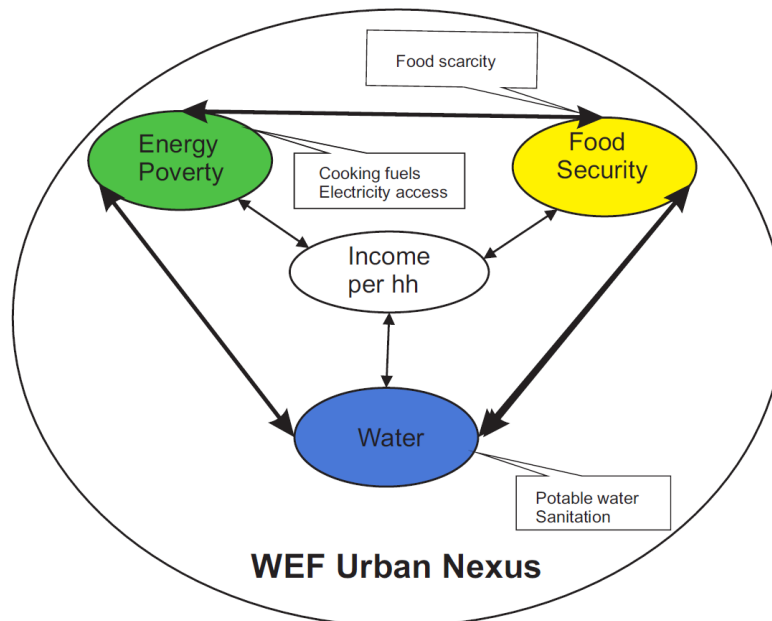


Figure 1. proposal methodology for WEF Urban Nexus. in a developing country.

Keywords: WEF Nexus; Quality of Life National Survey; Sustainable Development Goals.