



Assessment of water security: Case of study in the Federal District. Brazil.

Javier Martin Santin (1), Oscar de Moraes Cordeiro Netto (2), Conceição Alburquerque Alves (3), and Rodolfo Sánchez Morales (4)

(1) University of Brasilia. Brasilia. Brazil (javiermartinsantin@gmail.com), (2) University of Brasilia. Brasilia. Brazil (jcordeiro@unb.br), (3) University of Brasilia. Brasilia. Brazil (calves@unb.br), (4) University "Marta Abreu" of Las Villas. Santa Clara. Cuba (rodolfoism2014@gmail.com)

Materialize the water security concept is a complex problem; therefore the conceptual bases on the involved questions are not consolidated. There is no consensus on what to measure, how to measure and, principally, on as to ponder and combine data. This work argues and tests method for evaluation of the water security in the perspective of sustainable development of water resources, considering the system to be evaluated composed of subsystems (society, economic and ecosystem), dimensions and categories. The dimensions contemplate aspects that are characteristic of the system that must be considered for the evaluation. Conceptual Maps were used to carry out the conceptual analysis in different geographical space (state, municipality, city and hydrographic basin). Consultation to system evaluated key actors precedes the choice and balance of the aspects and dimensions. It was argued the adoption of the methodology based on multicriteria method. Aggregated index was calculated for dimensions, indicators and subsystems. The proposed approach was applied in the Federal District (Brazil).

Key words: Water Security, Conceptual Maps, indicators, index and multicriteria method.