Innovation in Water and Soil Conservation policy in the south-east of Tunisia, Exemple of FoPIA

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Résumé;
Characterised by the dilemma of extreme scarcity and instability of the offer and increase of the water resources in the arid regions. These regions know strong pressures that threaten seriously their durability. This situation made of these resources true economic goods requiring new approaches, analysis and management tools. Taking account of the complex character and of multi uses of the water resources, unidimensional and fragmentary approaches of water resources management reached their limits (Auger and *al*, 2004). This translates the interest to develop integrated approaches of management that consider the watershed as a relevant unit of management. There are many references that adopt this approach by watershed (Gangbazo, 2004; OECD, 2004). This paper reports on a participatory impact assessment of alternative soil and water conservation (SWC) scenarios in the Oum Zessar watershed, Tunisia. The first objective was to assess the impact of three SWC scenarios on key social, economic and environmental land use functions. The second objective was to test and evaluate the applicability of the 'Framework for Participatory Impact Assessment (FoPIA)' for assessing scenario impacts in the context of a developing country, in this case Tunisia. The assessed scenarios included: the originally planned SWC policy implementation at 85 % coverage of potential area of the watershed, the current implementation (70 %), and a hypothetical expansion of SWC measures to the entire potential area (100 %). Our results suggest that implementation of the SWC policy at 100 % coverage of potential area achieves the maximum socioeconomic benefit. However, if stakeholders' preferences regarding land use functions are taken into account, and considering the fact that the implementation of SWC measures also implies some negative changes to traditional landscapes and the natural system, SWC implementation at 85 % coverage of potential area might be preferable. FoPIA approved to be a useful tool for conducting a holistic sustainability impact assessment of SWC scenarios and for studying the most intriguing sustainability problems while providing possible recommendations for sustainable development. We conclude the participatory impact assessment contributes to an enhanced regional understanding of key linkages between policy effects and sustainable development, which provides the foundation for improved policy decision making.

Keywords: Sustainability assessment, Sustainable development Land use function, Ecosystem services, FoPIA (Framework for participant impact assessment), Oum Zessar watershed.

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