



Africa in movimento / Africa on the Move

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TITLE: Challenges of equity in a rapidly urbanizing Africa: the case of water infrastructures

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ABSTRACT:

High natural population growth and rural-to-urban migration make Africa the most rapidly urbanizing continent. Current urban population is expected to more than double in the next two decades. If not properly addressed urbanization and the associated land-use changes will pose a threat to ecosystems and human wellbeing.

Within this context understanding how ecosystems and their services sustain the well-being of urban dwellers becomes of utmost importance. In turn, this raises a key societal issues dealing with the sharing of benefits and costs for the maintenance of ecosystems and their services.

With a case study approach (Yin, 1994) and focusing on the role of urban water infrastructures, we propose a methodology for exploring synergies and tradeoffs between ecosystem services enhancement and poverty alleviation initiatives.

Urban water infrastructures constitute substantial collective assets that shape the spatial organization of cities, and directly contribute to the wellbeing of inhabitants. UWIs are essential for the flow of ecosystem services to urbanites, including water provisioning, and mediation of flows and wastes. Their spatial and functional configuration, which are typically laid out in spatial plans, play a key role in addressing two issues of policy relevance: (a) the spatial mismatch of ecosystem service production (e.g. the watershed) and benefit area (e.g. urban area), and (b) the equity in the access to benefits of different stakeholders.

In this study we develop a methodology to support spatial planning by designing watershed investments aimed at enhancing ecosystem services while promoting an equitable distribution of their benefits to people.

CONVENOR'S ACADEMIC PROFILE:

Blal Adem Esmail received his master's degree in civil engineering from the University of Trento, Italy. His dissertation on "sustainable concrete" was awarded with the Ito Del Favero first prize. Following three years of work experience in the industry, he is currently undertaking doctoral research in the area of sustainable urban water resources management and spatial planning.