



## **Presentation of the LESELAM observatory (Fight against Soil Erosion and siltation of the lagoon in Mayotte Island)**

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As a consequence of a dramatic increase of its population, the Mayotte Island is undergoing significant land use changes, mainly through an increase in agricultural areas as well as unplanned urban sprawl. Resulting soil erosion in natural degraded areas, in agricultural fields or from rural habitat threatens the sustainability of agriculture, as well as the balance of the lagoon ecosystem, one of the largest in the world, by siltation of the aquatic environment by sediments and adsorbed pollutants. In order to implement pertinent and sustainable remediation measure there is a need to quantify the sediment fluxes, identify the sources areas and raise awareness of population on land degradation.

In this context, the LESELAM project aims to involve local stakeholders in a collective effort to define and implement a set of technical and organizational practices in the fight against soil erosion for sustainable balance between the development of agriculture and rural housing on the one hand, and the quality of the lagoon environment, on the other hand. The operational objectives relate to (1) create an erosion observatory to characterize water erosion; (2) implement, in partnership with stakeholders, a demonstrator of good practice to test and evaluate at different scales different techniques of conservation agriculture and of remedial; and (3) structure collective and awareness action through a multi stakeholders approach and a significant communication component.

The actions presented in this study refer to a multiscale hydro-sedimentary instrumentation (observatory) of the Mtsamboro and Dzoumougné catchments and on the first transfer of competence to the various stakeholders.