

Environmental and coastal planning and development

## BIOMANGO

## UNDERSTANDING THE ROLE MANGROVE ECOSYSTEMS PLAY IN FRENCH GUIANA

Mangrove forests are very productive ecosystems which stimulate the carbon and nutrient cycles in coastal zones, providing irreplaceable socio-economic and ecological services.

In French Guiana, mangrove formation is both subject and adapted to recurrent sedimentary disturbances all along the coast due to the copious sediment delivered by the Amazon system. Adult mangroves stabilise the coastline, but each time mud banks are eroded, these forests are destroyed.

The resilience of mangroves in French Guiana plays a key role in structuring and functioning the ecosystem here. This resilience must be fully understood in order to develop a strategy for coastline management and conservation in this environment, with its natural disturbances and limited disruption from human activity.

The BIOMANGO project proposes to define the forests' capacity for resilience. The final results will establish a baseline for how the mangrove ecosystems function in French Guiana, which will help predict the ecosystem services that may be lost due to increasing pressure from humans (such as cases of hydrocarbon pollution).

To add further value to the project's findings, an innovative science communication team will disseminate these at educational workshops in French schools.



## Partner

## **Research center**

UBO, IUEM, Laboratoire des sciences de l'Environnement MARin (LEMAR), UMR 6539, Brest [Project Developer]

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- Agence Nationale de la Recherche

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