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INN WATER

Promoting social innovation to renew
multi-level and cross sector water governance

February 2026

Result Factsheet

INCLUSION OF ENVIRONMENTAL COSTS WITHIN WATER TARIFF AND PRINCING

Valuing Coral Reef Ecosystem Services in La Réunion
through a Discrete Choice Experiment

RESULT Type:
Scientific or technological R&D

[Link to the resources](#)



Owner:  UNIVERSITÉ
DE LA RÉUNION

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NORMANDY



InnWater has received funding from the European Union's under
Horizon Europe programme,
Grant agreement n° 101086512

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Description

This study measures how residents of La Réunion value improvements in marine ecosystem health through a Discrete Choice Experiment (DCE). The survey explores public preferences and willingness-to-pay for scenarios defined by three key attributes: the health of coral reefs, the quality of bathing waters, and the contamination level of seafood products. The monetary attribute is expressed as a voluntary donation to support public actions aimed at improving wastewater management and reducing domestic pollution.

The willingness-to-pay estimates obtained from the DCE will be integrated into the REFWE Computable General Equilibrium Model to incorporate an ecosystem dimension, linking environmental quality and economic dynamics. This innovative approach bridges environmental economics and macroeconomic modeling to support evidence-based policy design for coral reef protection and sustainable water management in island contexts.

TARGET AUDIENCES

EU and Member State policy-making

To raise awareness and possibly influence policy for sustainable wastewater management and coral reef protection.

Research and Technology Organisations (RTOs)

To collaborate and apply the DCE approach in testing, adapting, and improving the methodology in different contexts.

Other actors

To provide technology transfer expertise and support the adaptation and scaling-up of the framework to new application areas.

We are looking for

From a scientific perspective, we plan to present and discuss the DCE results with the local experts and marine scientists already involved in the focus group phase. This step will ensure the scientific robustness and relevance of the findings before integrating the ecosystem valuation into the REFWE general equilibrium model.

Unique value proposition

First economic valuation of coral reef services in La Réunion using DCE and integration with a general equilibrium model (REFWE). Provides decision-makers with robust, localized, and quantitative evidence for environmental policy design.



SDG'S

Impacts

Scientific: Provides the first quantitative valuation of coral reef ecosystem services in La Réunion, integrating a DCE with a Computable General Equilibrium model (REFEWE). Enhances interdisciplinary research linking environmental economics, marine science, and macroeconomic modelling.

Economic: Offers a framework to internalize ecosystem services into public investment and pricing strategies for wastewater management and marine protection, improving the efficiency of resource allocation and long-term economic planning in island contexts.

Societal: Raises public awareness of the value of marine ecosystems, reinforces citizen engagement through stated-preference surveys, and supports evidence-based policy dialogue between scientists, policymakers, and local communities.

Environmental: Promotes the conservation and restoration of coral reef ecosystems by quantifying the benefits of improved water quality and pollution reduction, contributing to sustainable water and biodiversity management aligned with the EU Green Deal and SDG 14 (“Life below water”).

Use beyond the project life

The valuation framework and model integration can guide future public investment and pricing strategies for water management and biodiversity conservation beyond the InnWater project.



Key benefits



Support for integrated water and reef management policies.



Transferable methodology for other island ecosystems.



Evidence-based valuation of non-market ecosystem services.

Replicability

The DCE design and modeling framework can be replicated in other coastal or island contexts facing coral reef degradation, enabling comparative studies and scaling of policy recommendations.

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Legal requirements - IPR

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