

Long-term evolution of preferences for conservation projects in the Seto Inland Sea, Japan: A comprehensive analytic framework

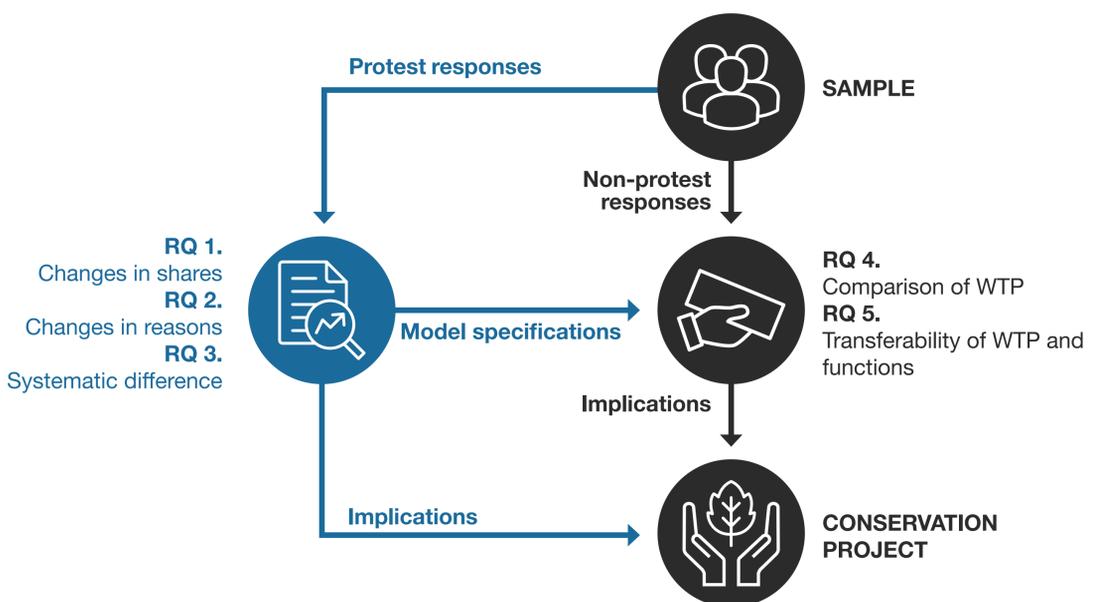
BACKGROUND

The long-term evolution of preferences for nature is crucial to conservation projects, given their targeted long-term horizons. Neglecting to account for this evolution could lead to undesirable human–nature relationships.

This study compares the **willingness to pay (WTP) for three coastal conservation projects in the Seto Inland Sea, Japan, at two distant time points (1998 and 2015)**, and tests for temporal transferability. It also compares protest responses that are often overlooked in WTP practices, regardless of their utility for conservation projects.

METHODS

Given the lack of a unanimous protocol for protest response analyses and their use in estimating WTP, **we propose a comprehensive analytic framework** that integrates the two.

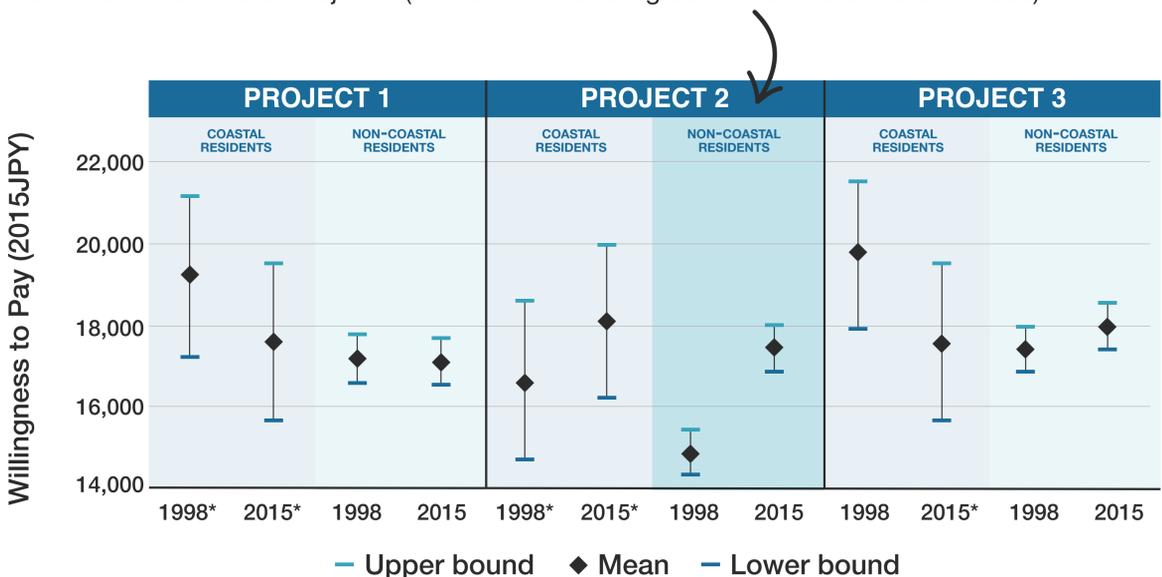


RESULTS

We show that, while preferences for coastal ecosystem services were overall stable and temporarily transferable, the **preferences for certain aspects of conservation projects considerably changed**.

CONFIDENCE INTERVALS OF MEAN WTP

The figure shows changes in the mean WTP with 95% confidence intervals across 17 years by geographical origin. The confidence intervals overlap for all models, except for non-coastal residents in the case of Project 2 (conservation of seagrass beds as cradles of the sea).



DISCUSSION

Our results suggest **the need to reconsider the projects' scheme, not the ecosystem services themselves**, along with the clarification of beneficiaries and those responsible for past destruction.

We conclude by suggesting further studies with focus on regions experiencing significant social-ecological changes, such as developing countries, by exploiting the rich asset of existing valuations. This could contribute to the database for more temporal-sensitive ecosystem service valuations utilized for benefit transfers.