



RESCCUE

ECONOMIC AND FINANCIAL MECHANISMS FOR CLIMATE CHANGE RESILIENCE

HIGHLIGHTS

- ✓ Economic and financial mechanisms were at the heart of RESCCUE's strategy to sustain integrated coastal management activities, thereby increasing resilience to climate change.
- ✓ At the regional level, RESCCUE explored opportunities associated with greening taxes and subsidies, strengthening the mitigation hierarchy, land-use transactions, and economic incentives to control invasive species.
- ✓ On pilot sites, RESCCUE studied feasibility of over 50 economic and financial mechanisms. In practice, eight of them were implemented during the course of the project.
- ✓ The vast majority of mechanisms assessed and/or implemented by RESCCUE involve payments from ecosystem services beneficiaries as opposed to polluters. This translates higher political acceptability in Pacific Island contexts.
- ✓ RESCCUE faced a number of contextual and procedural challenges. Project partners overcame them by operating at multiple scales while combining provision of technical expertise with development of strategic partnerships to build trust and commitment, reinforce existing institutions or create new ones.
- ✓ Besides multiplying local innovations, a sustained endeavour is needed to: (i) achieve more tangible outcomes on greening taxes and subsidies in all PICTs; (ii) investigate more systematically opportunities associated with the tourism and fisheries sectors; and (iii) assess the potential of mechanisms not covered by the project such as impact investment, insurance mechanisms, debt-for-nature swaps and green/blue bonds.



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RESCCUE IN A NUTSHELL

The overall goal of RESCCUE was to contribute increasing the resilience of Pacific Island Countries and Territories (PICTs). To this end RESCCUE supported adaptation to climate change through integrated coastal management (ICM), resorting especially to economic analysis and economic and financial mechanisms.

Alongside this overall objective at the regional level, RESCCUE had specific objectives at pilot sites:

- Develop integrated coastal management planning and implementation;
- Strengthen the use of economic analysis for integrated coastal management;
- Ensure economic and financial sustainability of integrated coastal management;
- Facilitate learning, dissemination and replication of experiences gained from pilot sites.

Implementing economic and financial mechanisms so that ICM activities be sustained beyond the project's duration was at the core of RESCCUE's strategy.

THE RESCCUE APPROACH TO ECONOMIC AND FINANCIAL MECHANISMS – A REMINDER

A brief document entitled [The RESCCUE approach](#) outlined among other what was understood by “economic and financial mechanisms” within RESCCUE. It built on two reports previously produced under RESCCUE: “[Innovative financial mechanisms for coastal management in the Pacific: a state of the art](#)”, and “[Economic tools for biodiversity: what contributions to expect from additional players in a crowded playing field?](#)”. Key points are reminded here.



KADAVU, FIJI

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Mechanisms considered in RESCCUE

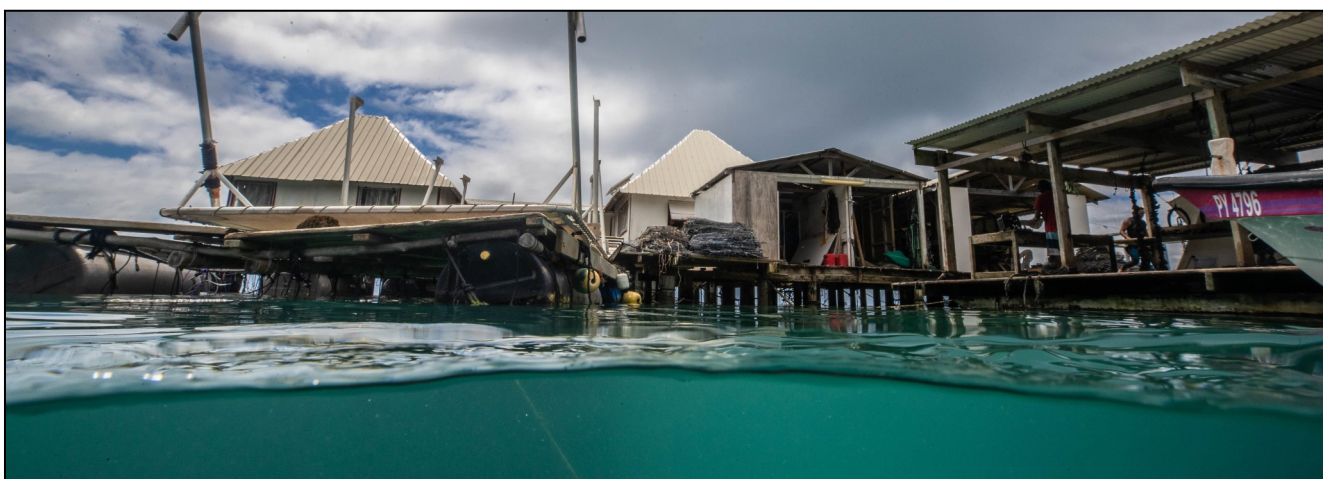
Economic and financial mechanisms refer to a wide range of instruments that can help generate additional and sustainable funding and/or achieve a positive environmental outcome through incentive monetary transfers among stakeholders. They may involve setting up new transfers (e.g. a payment for ecosystem services scheme) or changing existing ones (e.g. taxes, subsidies, tax exemptions). Table 1 below offers a typology of these mechanisms.

Existing institutions and dynamics

Most economic and financial mechanisms interact with existing institutions and governance systems. They are inserted into larger fiscal systems and monetary transfers among stakeholders. Success of their implementation requires them to fit with or be adapted to these existing systems and dynamics. It also rests upon commitments to higher environmental objectives taken by relevant institutions. Economic and financial mechanisms are no magic sticks: they are a means to an end and require no less political will than other public action instruments. Thorough analysis of the institutional context in which new mechanisms are deployed — or existing ones strengthened — was key to RESCCUE's theory of change. Economic and financial mechanisms complement, rather than replace, more traditional instruments such as norms, protected areas etc.

Effectiveness, efficiency and equity

Three principles are at the core of the sustainability and replicability of new mechanisms or changes in existing ones: environmental effectiveness (e.g. additionality), economic efficiency (e.g. low transaction costs) and distributive equity (e.g. rights, access and justice considerations). When assessing and implementing economic and financial mechanisms, RESCCUE considered the three of them, as well as their inter-dependencies.



PEARL FARMING, GAMBIER, FRENCH POLYNESIA

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ECONOMIC AND FINANCIAL MECHANISMS UNDER RESCCUE

Regional activities

Some economic and financial mechanisms go beyond the scale of RESCCUE pilot sites, and are relevant to the entire Pacific islands region. RESCCUE explored opportunities associated with four of them:

- [Greening taxes and subsidies](#), as a way to limit harmful behaviours, encourage environmentally-friendly ones and/or generate additional funding.

–[Strengthening the mitigation hierarchy implementation](#), both as an economic incentive for project developers and governments, and a source of funding for ecological restoration and conservation through biodiversity offsets;

–[Using land and land-rights transactions](#) as a way to placing a legal restriction on a particular plot of land to limit development or resource use and/or impose certain management practices;

–[Resorting to economic incentives to control invasive species](#), so as to bridge the funding gap in invasive species management and increase the harvest effort of these species.



PINEAPPLE FARMING, MOOREA, FRENCH POLYNESIA

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For each of these mechanisms, the project reviewed past and existing efforts, identified challenges and opportunities, and provided recommendations both at the regional level and for each of the four RESCCUE countries and territories.

In New Caledonia and French Polynesia, upon requests from partner administrations, the project developed precise taxes and subsidies reform proposals and assessed their socio-economic and environmental impacts. Similar in-depth studies are needed in any country wishing to engage in actual reforms.

Pilot sites activities

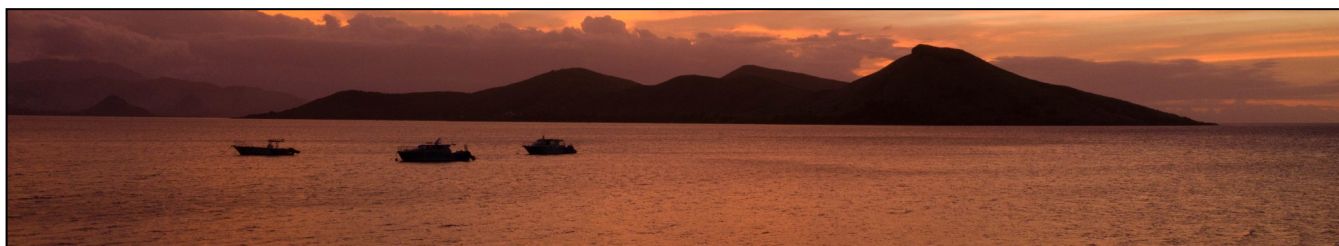
In its seven pilot sites, RESCCUE conducted feasibility studies of potential economic and financial mechanisms, before setting up and implementing the most promising ones (see Table 1).

Ra and Kadavu Provinces, Fiji

[In Ra, the feasibility study](#) found that the main opportunity was a marine conservation agreement to fund the proposed Vatu-i-Ra Conservation Park in partnership with local communities, the tourism sector, and the Wildlife Conservation Society (WCS). RESCCUE supported the formal establishment of the Park – which became Fiji's largest marine protected area, and the development and adoption of [the Vatu-i-Ra Conservation Park management plan](#).

In parallel the project set up [a marine conservation agreement](#) and a local trust to cover recurrent management costs and support education and community development. 18 education grants for tertiary students were allocated in 2018 by to the newly established fund. The source of income is a voluntary contribution paid by divers and other visitors to the Park, generating an estimated EUR 6,000-12,000 per year.

[In Kadavu](#), [the feasibility study](#) highlighted opportunities associated with island-wide organic farming certification, and demonstrated the financial and environmental benefits of kava organic certification (primarily for the export market). However, the two tropical cyclones Winston in 2016 and Keni in 2018 severely affected kava production in Fiji, postponing the shift to organic certification.



VATU-I-RA, FIJI

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Southern Province, New Caledonia

In the Southern Province of New Caledonia, RESCCUE [studied the feasibility](#) of five mechanisms: setting up an ecotourism label, mobilizing private donations, reallocating entrance fees for protected areas, setting up a payment for ecosystem services (PES) scheme associated with hydropower generation in Yaté lake, and reviewing the computation and allocation of user fees for occupying the public domain.

Only the latter two were found to have significant revenue generation potential. The Province did not wish to further investigate the PES scheme, but requested a more [in-depth analysis](#) on integrating ecosystem services values in the user fees for occupying the public domain and on a modus operandi for user fees and tax allocation. However at the end of the project none of the options explored had been translated into action.



GREAT SOUTH, NEW CALEDONIA

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Northern Province, New Caledonia

In [the Northern Province of New Caledonia](#), RESCCUE assessed [the feasibility](#) of economic and financial mechanisms to:

- (i) Provide funding to the World Heritage management associations, with a focus on the municipalities of Poum and Poindimié. Among the six mechanisms studied, the Province and the two associations decided to trial corporate philanthropy (around Euros 4,500 raised to date) and donation boxes (now in place), and to set up a tourism fee associated with the visit of a former mine in Poum (mine of Pilou, but this was later dropped).
- (ii) Support the Northern Province in implementing a user fee for the sea cucumber sector. The fee is now being set-up.

In addition, RESCCUE tested [two economic incentives to better control invasive deer and pig populations](#) in Touho municipality: supporting local hunting association to sell venison meat as a source of funding, and organizing a lottery and individual hunting competition. The project also raised the bush meat market issue high on the political agenda through a [country-wide study](#).



PEARL FARMING, GAMBIER, FRENCH POLYNESIA

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Gambier and ‘Opunohu, French Polynesia

In [French Polynesia](#), RESCCUE studied [the feasibility of economic and financial mechanisms](#) to support sustainable pearl farming in the Gambier Islands and sustainable agriculture in ‘Opunohu. Seven types of mechanisms were investigated, ranging from ecolabels and conditional subsidies to fees and taxes. Several of them were deemed both feasible and appropriate by relevant authorities.

However, the short project timeframe and local political agendas have not yet allowed significant implementation. A “circular economy” reward system for out-of-use plastics from pearl farming was successfully tested. Several other mechanisms still have strong implementation potential in the coming years should the Agriculture and Marine Resources Department decide so.

In addition, RESCCUE defined the modalities to revise the existing [user fee for domestic waste management in the Gambier](#) and to implement [user fees for moorings and sailboats management](#) in both the Gambier and Moorea.

North Efate, Vanuatu

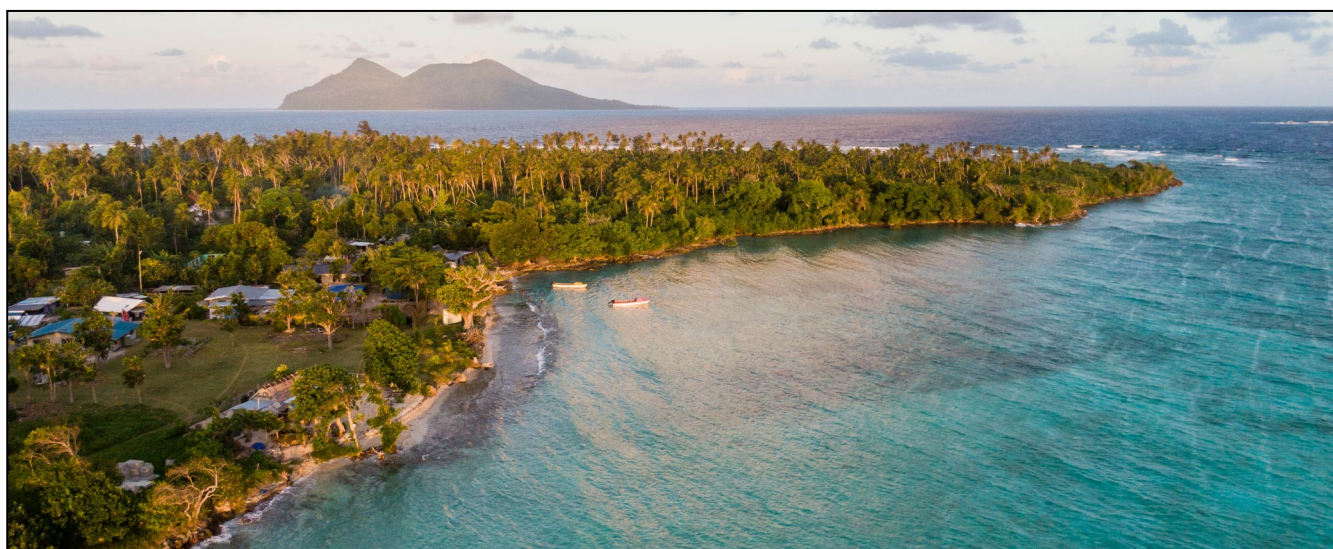
[In North Efate](#), the project established the North Efate Conservation Trust, following [a feasibility study](#) of economic and financial mechanisms. This trust is a partnership between local communities associations, the provincial tourism authority and Live and Learn Vanuatu to fund integrated coastal management activities such as coral replanting, waste management or enhancement of local protected areas. The source of funding is a voluntary 10% conservation levy on accommodation and tourism activities, generating an estimated EUR 9,000 per year.

RESCCUE provided EUR 90,000 of seed funding to the Trust, which will be used over the next few years to start collecting the levy and managing the fund, while conducting tangible activities to demonstrate tourists what their contributions will be used for.



CORAL PLANTING, NORTH EFATE, VANUATU

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NORTH EFATE, VANUATU

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Table 1. Main Economic and financial mechanisms assessed (in blue) and implemented (in green) by the RESCCUE project

What for? Who pays?	Economic mechanisms <i>Primary objective: provide incentives to limit harmful / encourage positive behaviors for biodiversity and ecosystem services</i>	Financial mechanisms <i>Primary objective: generate funding to cover administrative or management costs for biodiversity and ecosystem services conservation or restoration (one-off or regular payments)</i>
Polluter pays <i>An agent pays because he degrades biodiversity and ecosystem services</i>	<ul style="list-style-type: none"> • Tax/Ecotax to change behavior (regional, FP, NC) • Eliminate harmful subsidies (regional, FP, NC) 	<ul style="list-style-type: none"> • Tax/Ecotax to generate funding (regional, FP, NC) • Biodiversity offset (regional, NC) • Royalty for mining operations in NC • Domestic and pearl farming waste management user fee in the Gambier, FP • Pearl farming lease deposit for rehabilitation in FP • Reward system for out-of-use plastics from pearl farming in the Gambier, FP
Beneficiary pays <i>An agent (or a representative) pays to benefit from ecosystem services and biodiversity conservation or restoration</i>	<ul style="list-style-type: none"> • Subsidies (regional, FP, NC) • Payment for ecosystem services in Yate Lake NC • Conservation easements and conservation leases (regional, FJ, NC, FP, VU) • Conditionality to land leases in VU • Ecolabel for pearl farming in the Gambier, FP • Organic farming in Opunohu, PF and Kadavu (FJ) • Erosion-control conditionality to pineapple farming subsidies in Opunohu, FP • Ecotourism label in the Great South, NC • Local bushmeat market as an incentive to control invasive deer populations in Touho and in NC • Invasive deer and pigs hunting contest & lottery in Touho, NC 	<ul style="list-style-type: none"> • Land acquisition (regional) • Entrance fees to protected areas in the Great South, NC • User fees for occupying the public domain in the Southern Province of NC • Recreational moorings user fees in Moorea and the Gambier, PF • Tourism operators contributions in Opunohu, FP • Public donation boxes and private sponsoring for world heritage site management association in Poindimié, NC • Conservation fund in North Efate, VU • Vatu-i-Ra marine conservation agreement in Ra province, FJ • User fee for the sea cucumber industry in the Northern Province of NCⁱ
FJ: Fiji; NC: New Caledonia; FP: French Polynesia; VU: Vanuatu ⁱ This mechanism is being implemented by the Northern Province as of 2019		

SOME LESSONS LEARNED ALONG THE WAY

Context matters

RESCCUE faced several context-related challenges along the way. These relate to the project intervention's background, and especially to the selection of pilot sites. In five out of seven (the exceptions being Moorea and the Great South of New Caledonia), subsistence economy dominates with very little formal economic activity. Six out of seven (the exception being Moorea) also have a low population density. Most islands and coastal areas in PICTs actually share similar characteristics. In such contexts, potential sources of funding other than from administrations and NGOs are scarce, and so are opportunities to make polluters or beneficiaries pay.



KAVA DRYING IN KADAVU, FIJI

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This created a discrepancy between initially high expectations of the project, and actual opportunities in terms of economic and financial mechanisms on the pilot sites. A selection of pilot sites with more diverse economic patterns including urban areas may prove interesting for future projects.

More broadly, PICTs' economies are highly public sector-driven. Many tax exemptions schemes and tax expenditures support a rather low number of large privately owned industrial stakeholders. On one hand, targeting these stakeholders on an ad-hoc basis may not be an effective strategy as it adds layers of complexity. On the other hand, reforming tax exemptions and expenditures or implementing national polluters-pay schemes proves politically challenging.

Other context-related challenges include legal obstacles, such as the Surfing Decree in Fiji which prohibits access fees to coastal areas for recreational activities; or the tax stability scheme between mining operators and the New Caledonian government which freezes current tax exemptions.

Transaction costs and lack of data

RESCCUE encountered procedural challenges relating to the implementation of economic and financial mechanisms. The two main ones were: (i) transaction costs; and (ii) the lack of ecological data and the complexity of ecological processes. While transaction costs hamper effectiveness and replicability, the lack of data makes it difficult to anticipate and evaluate the tangible impacts on ecosystems of implemented mechanisms.

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The magnitude of these challenges varies across contexts. For instance, the costs of establishing the two local conservation trust funds under RESCCUE ranged from around EUR 30,000 in Vatu-i-Ra¹ to EUR 130,000 in North Efate². Their operating costs range from around EUR 500 to 4,500 / year respectively.

Promising opportunities in the tourism and fisheries sectors

Despite challenges, RESCCUE encountered a high interest from stakeholders, found more existing experiences than initially anticipated and identified many opportunities at pilot sites and beyond. Of particular interest are opportunities associated with the tourism and fisheries sectors. For instance, both sectors appear key to support protected areas management.

At the local level, tourism has been identified as a significant source of funding in almost all RESCCUE pilot sites (e.g. via user fees, marine conservation agreements, local conservation trust funds, donation boxes etc.). More broadly, the RESCCUE experience showed that tourism also represents a source of funding for climate change resilience and biodiversity conservation in the PICTS at national levels. Examples include nation-wide user fees schemes (e.g. protected areas entrance fees) or specific taxes (e.g. taxes on airport arrivals or on cruise ships), all or part of which can be allocated to environmental management.



VATU-I-RA, FIJI

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As for coastal and pelagic fisheries, the project did not investigate associated economic and financial mechanisms due to local contexts and lack of demand. The only notable exception was that of the bêche-de-mer in the Northern Province of New Caledonia. Given the utmost importance of this sector to the region, and current threats associated with ecosystems degradation and climate change, further efforts are needed to review existing mechanisms, such as license fees, permits and subsidies, while testing new ones such as individual transferrable quotas, to support ecosystem-based and community-based fisheries management.

¹ When adding-up the costs of developing and adopting the conservation Park management plan, the total becomes EUR 220,000.

² This estimate includes the costs related to the development and adoption of the associated business and conservation activities plans.

Scaling-up

RESCCUE overcame both contextual and procedural challenges associated with the implementation of economic and financial mechanisms by operating at multiple scales - regional, national and local. Local RESCCUE initiatives were instrumental in pilot-testing specific mechanisms, and provided lessons to inform their potential replicability as well as provincial and national strategies. However, multiplying local implementation of economic and financial mechanisms without any strategic approach generates high risks of complexification and illegibility, as well as significant transaction costs. By operating also at larger scales (national and regional), the project covered a wider range of mechanisms (such as taxes and subsidies or biodiversity offsets) and allowed for a more coherent and effective approach, tailored to management needs, for instance by pooling resources, costs and risks.



HUNTMAN FROM THE TIPWOTO ASSOCIATION, TOUHO, NEW CALEDONIA

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Balancing technical expertise and strategic partnerships: a key to success

Setting up economic and financial mechanisms requires very specific expertise and technical skills, which may not be available locally. The RESCCUE experience showed that their successful implementation also relies on the establishment of strong partnerships, and existing political support and commitments, at multiple scales.

Striking a balance between the technicality of design and the legitimacy derived from strategic partnerships has been a key factor of success. Significant resources were allocated to the development of such partnerships, through participatory processes and consultations.

This allowed building trust and empowering stakeholders to take ownership of the mechanisms, while ensuring social justice issues were well accounted for (e.g. in Vatu-i-Ra, 70% of the funds generated by the marine conservation agreement support education and community development).

What next?

While pursuing pilot operations to put innovative mechanisms to test at local scales, a sustained endeavour is needed to: (i) achieve more tangible outcomes on greening taxes and subsidies in all PICTs; (ii) investigate more systematically opportunities associated with the tourism and fisheries sectors; and (iii) assess the potential of mechanisms not covered by the project such as impact investment, insurance mechanisms, debt-for-nature swaps and green/blue bonds.



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