

ICRI - general meeting 28
Belize, October 2013

Ad Hoc Committee on Economic Valuation

Chairmanship: ICRI Secretariat
Technical assistance: CRIOBE



Scope of the AHC

AHC objectives:

- Policy-makers and budget makers are aware of the coral reef economic importance (Aichi target #2)
- Public and non public financing strategies for coral reef conservation are well known (Aichi target #10 and 20)
- Regulations for compensation of impacts are present in all ICRI countries

Actions:

Activity 1: Facilitate the dissemination of relevant information on economic valuation through ICRI channels

Activity 2: Act as a coordinating platform to report on relevant international and regional initiatives

Activity 3: Official ICRI recommendation for coral reef compensation mechanisms

Activity 4: Produce 2 policy briefs

(i) Economic benefits of coral reef ecosystem services

(ii) Conservation finance strategies for coral reef

Expected results:

- ❑ Increase public investment (regulation and budget)
- ❑ Diffuse the potential of CR financing mechanisms
- ❑ Support the implementation of compensation regulations in national policies

History

- * Born in 2008 , GM2I
- * Results YTD: contributions to:
 - * On-line database of valuations (MESP)
 - * Compilation of valuations
 - * Platform of exchange

AHC, ecosystem services, economic valuation
what for?

Inform and convince

Find money

Inform & convince :

Policy makers, budget makers, local stakeholders and multilateral agencies to re-allocate resources or apply new regulations to coral reef management

Target 2 Aichi

By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.

Global initiatives:

TEEB: The Economics of Ecosystems and Biodiversity, UNEP - national studies

WAVES: Wealth Accounting and the Valuation of Ecosystem Services

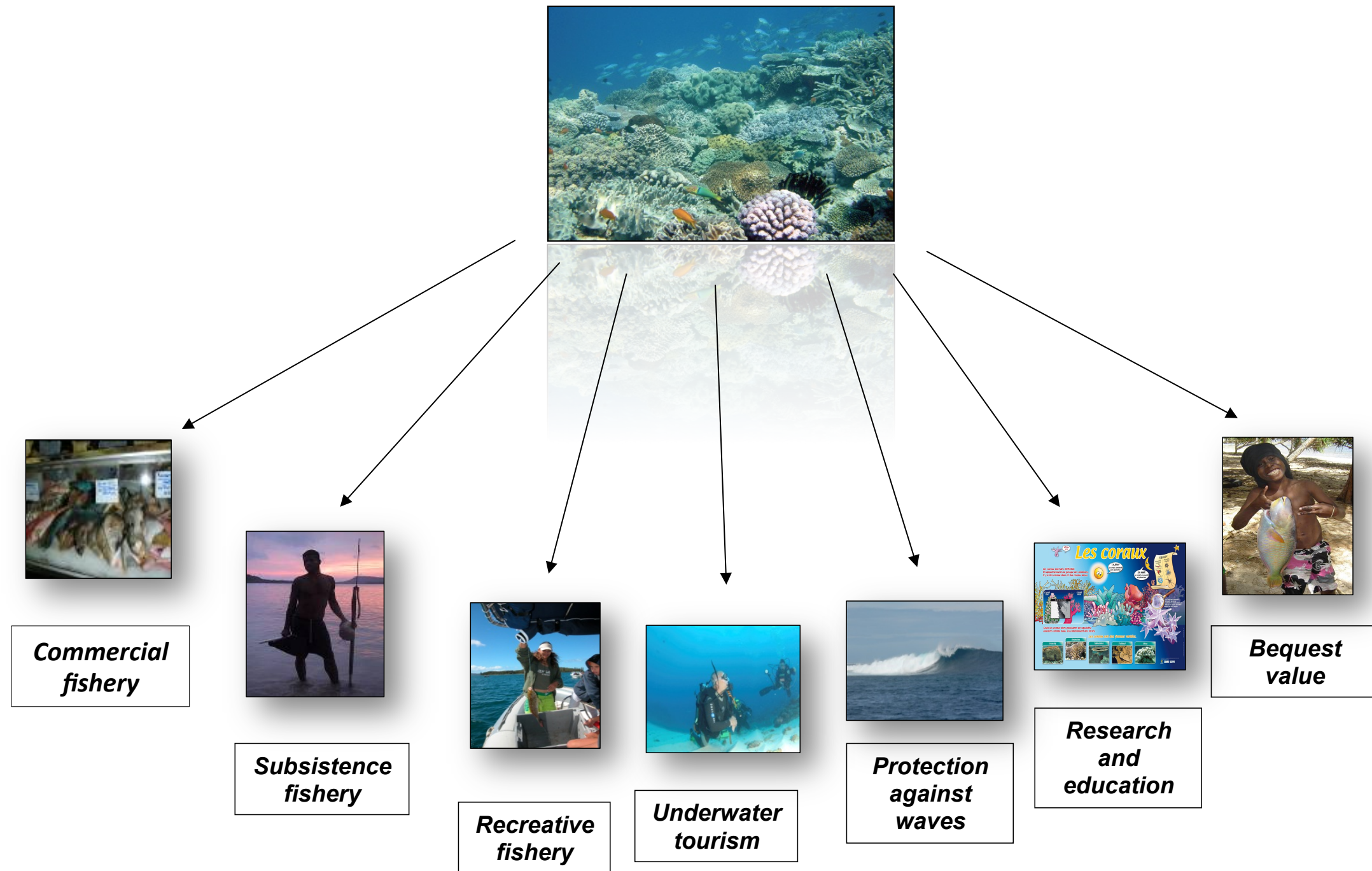
BIOFIN: UNEP



Coral reef related economic projects:

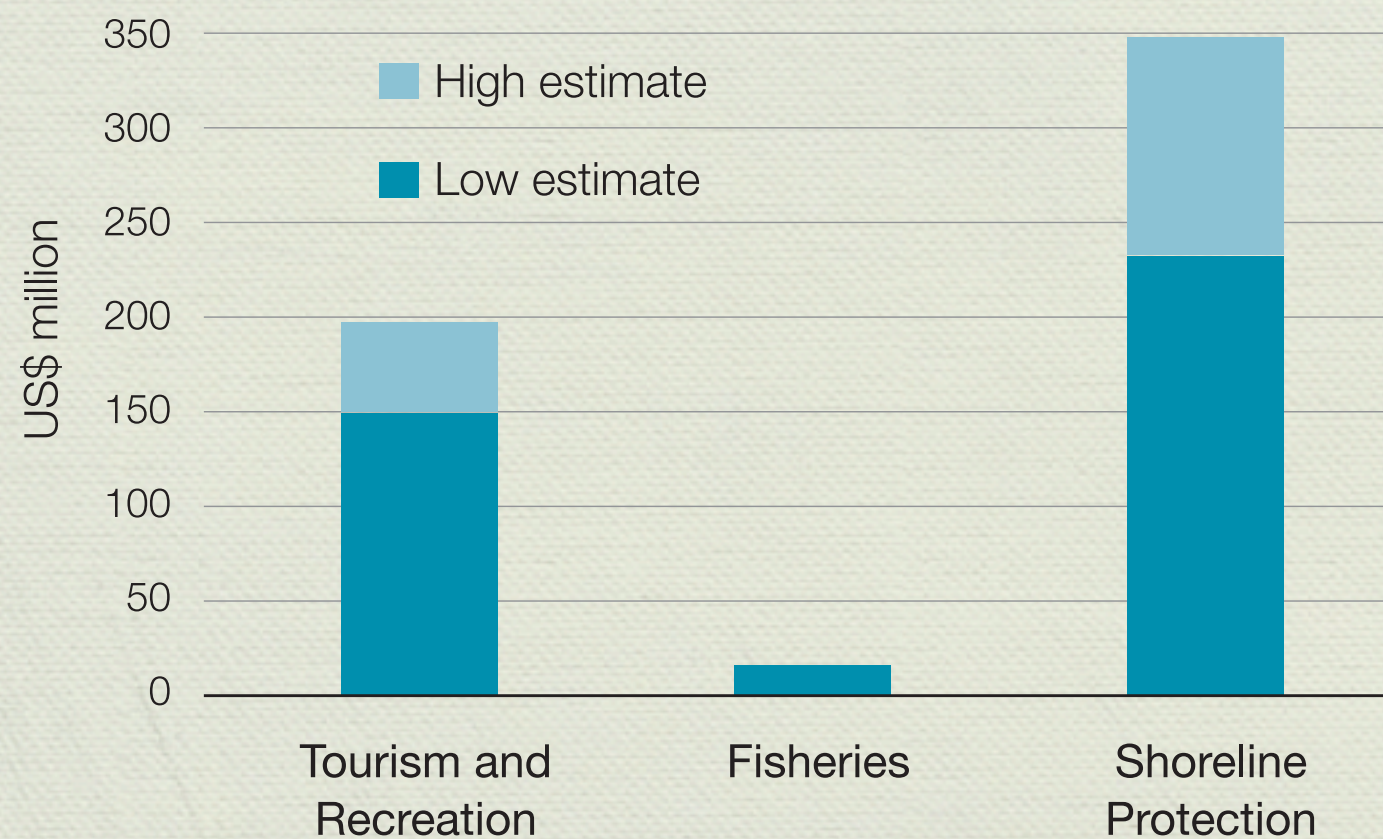
- ♦ IFRECOR (12 french territories)
- ♦ WRI - Caribbean policy guidance
- ♦ TEEB Ocean&coast (in prep.)
- ♦ ReefFix (OAS: 9 sites in Caribbean)
- ♦ RESCCUE (AFD/FFEM): 4 countries (South Pacific)
- ♦ COREMAP III (GEF/ADB): SE Asia
- ♦ CCRES (GEF) : 2 countries (SE Asia)
- ♦ MACBIO (GIZ, TEEB): 5 countries
- ♦ Individual studies: Bonaire, Vanuatu, Fiji, Honduras and many others.

Main ecosystem services from coral reef

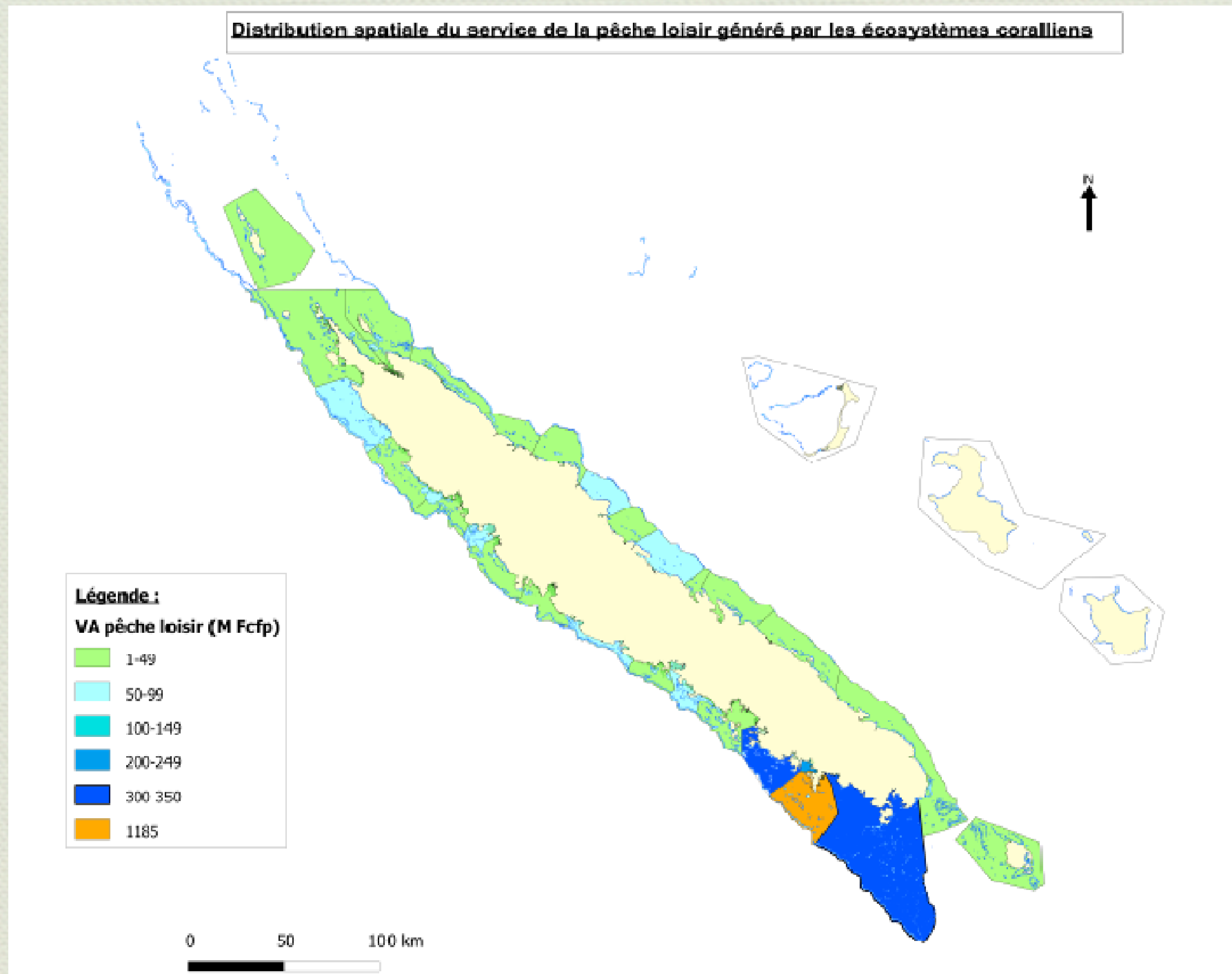


WRI: coastal capital of Belize

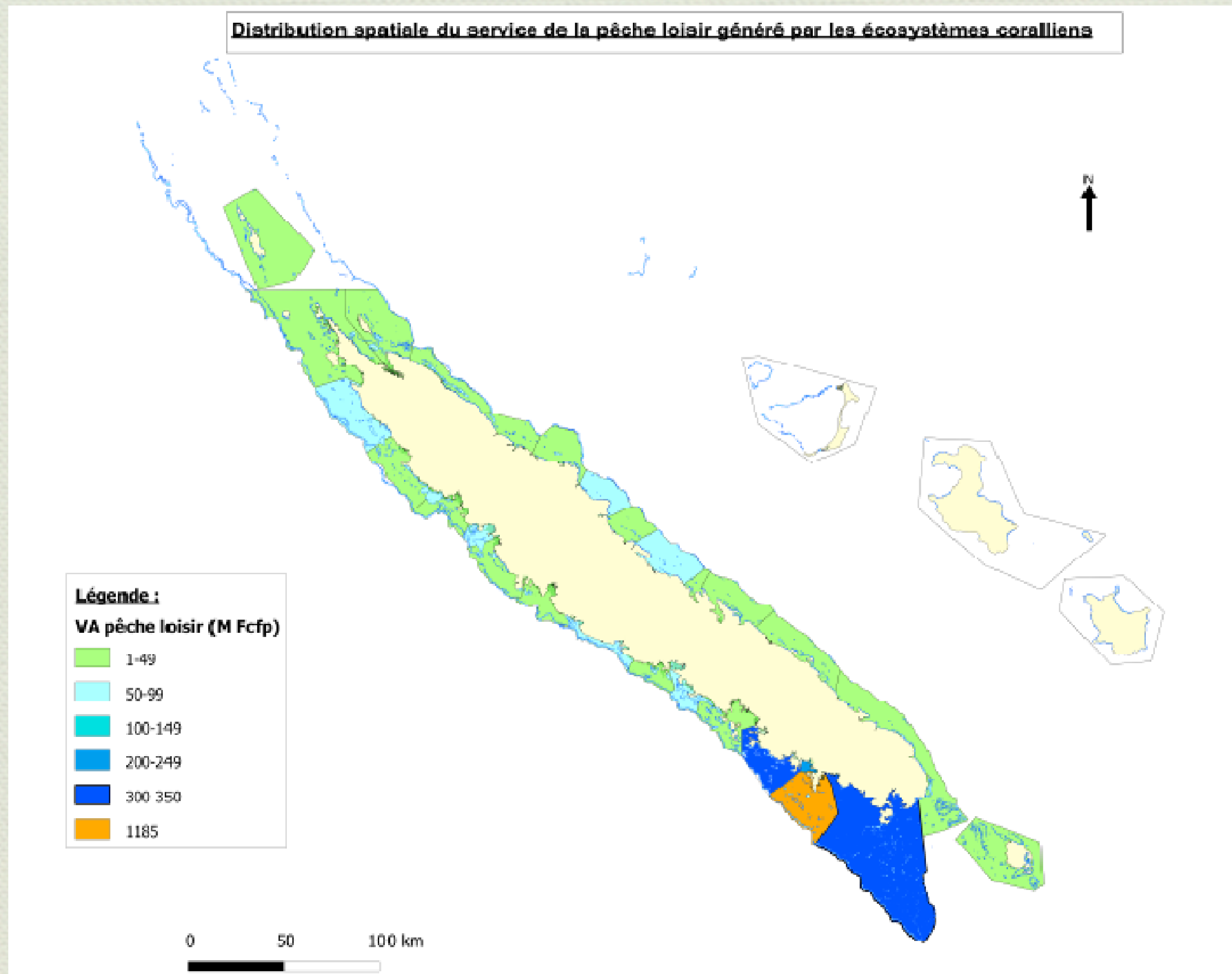
ANNUAL ECONOMIC CONTRIBUTION OF CORAL REEFS AND MANGROVES IN BELIZE



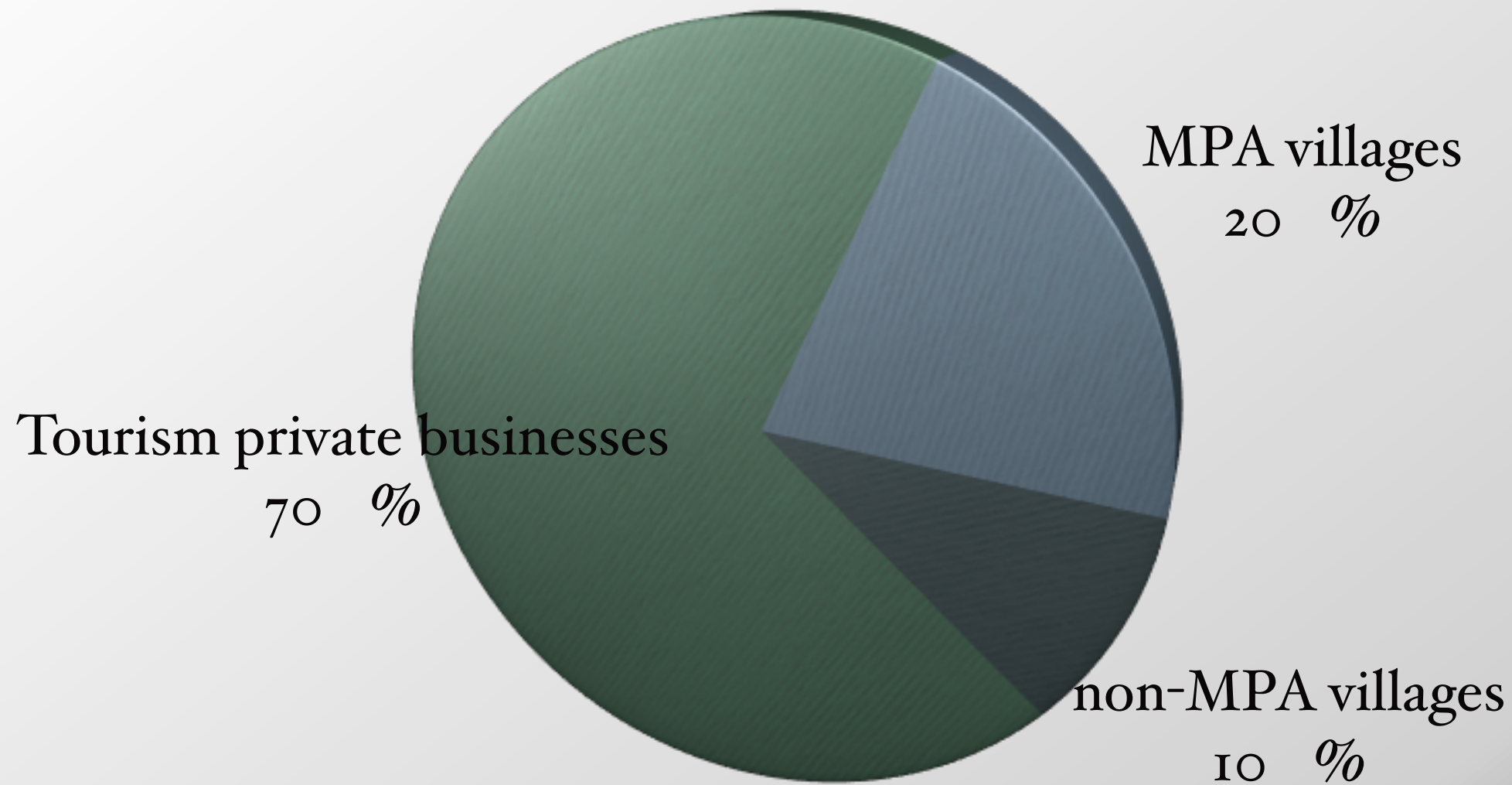
Spatial distribution of ecosystem services of New Caledonia coral reefs



Spatial distribution of ecosystem services of New Caledonia coral reefs



MPA beneficiaries



Spillover and larval dispersal potential from MPA



MPA beneficiaries

Average impacts per MPA per year: \$US 77k

Total benefits from MPAs in North Efate: \$US 385 k per year

Spillover outside of village boundaries > 30% of the total

400 households with benefits (protein and cash)

>10 tourism businesses, 30 jobs

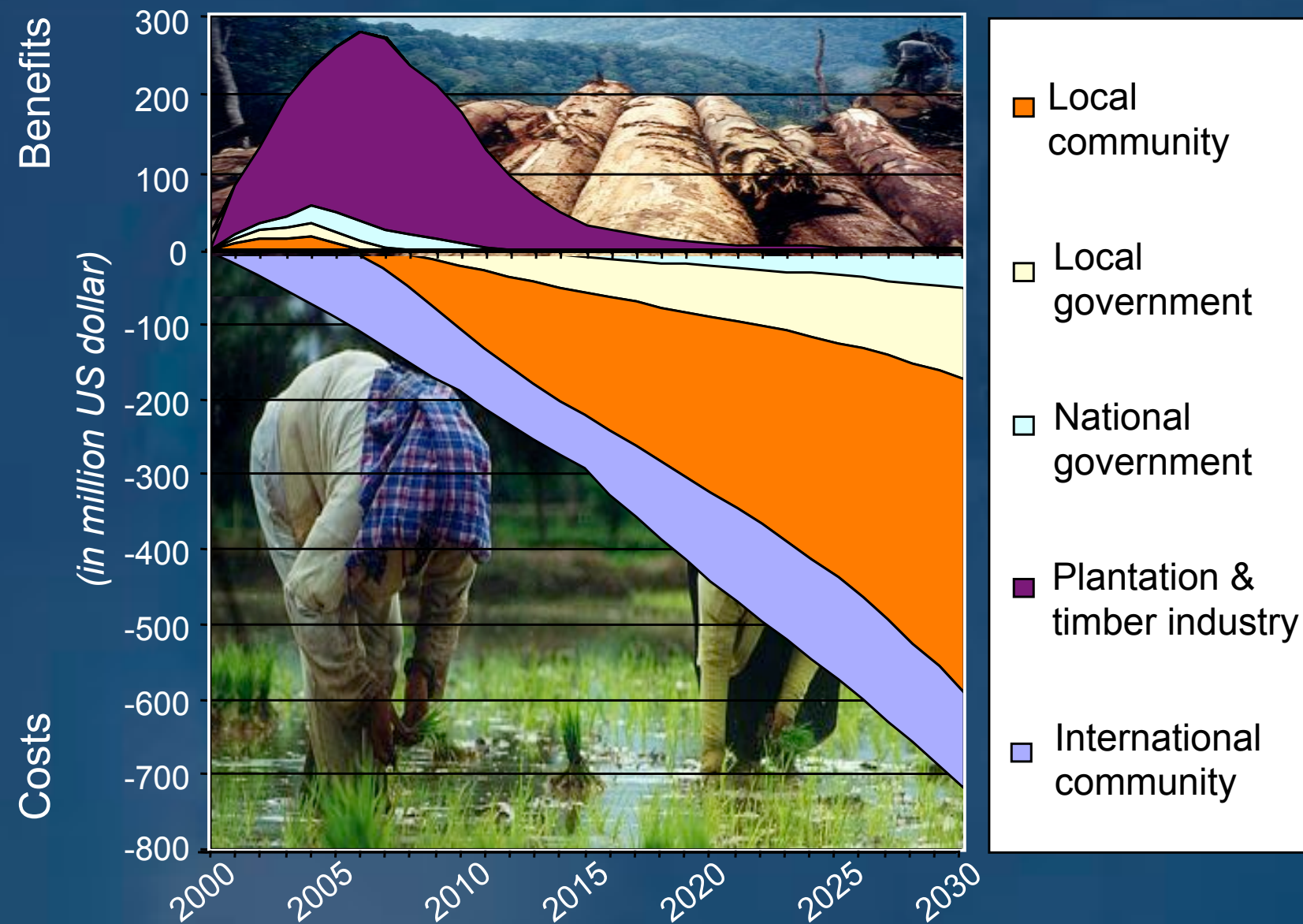
12 000 visitors

MPA Return on Investment

Benefit-Cost ratio > 6 in Vanuatu
(25 yr. , 10% discount rate)

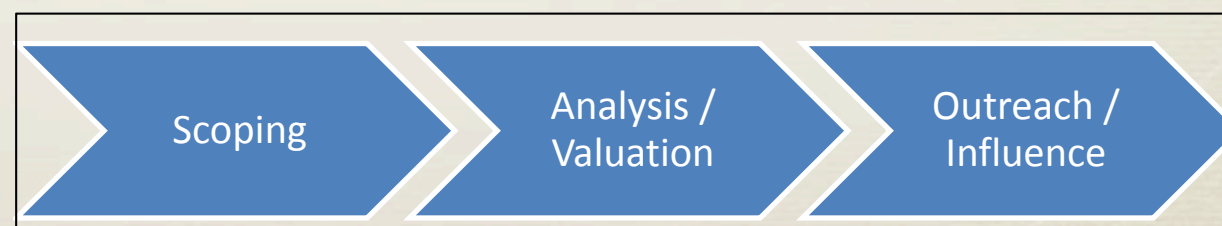
RoI since creation of MPAs > 3
(1 Vatu invested in MPA has produced 3 Vatu of benefits for
society after 5-10 years)
30% for villages and 70% for private business owners

Who wins, who loses?



Commucation

- * Technical reports
- * Policy briefs
- * Workshops, meetings
- * Policy guidance strategy



Effectiveness?

Study results	Diffusion	Impacts (direct or contribution)	Cost of study and diffusion
Economic value of New Caledonia coral reefs ES . Beneficiaries. Spatial distribution.	Policy briefs, workshops, media, scientific paper	Conservation budget allocation, Compensation tuning	50 k€ (w/o non use value)
Economic value of Vanuatu mangrove ES. Beneficiaries.	Technical report, Workshops	Support to compensation new regulation	15 k€
Economic analysis of St Martin MPA. Beneficiaries.	Technical report	Diving tax calibration	22 k€
Economic analysis of Bonaire Coral Reefs	Policy briefs, workshops, media,	Budget advocay for nature conservation Trade-off decisions for waste water treatment	?
Economic analysis of JKNatural Park (Honduras). Beneficiaries.	Policy briefs, workshops, media	Analysis of financing sources Setup of a PES NO impacts on conservation public budget	45 k€
CBA of ODA project and impacts on ES. Beneficiaries (Comoros)	Technical report	Analysis of financing sources Setup of a trust fund	14k€
Economic analysis of MPAs in Fiji	Technical report, Workshops	Values used in a negotiation of a compensation scheme	45k€
Estimating costs and benefits of destructive fishing in Kiribati:	Technical report	Specific fishery regulation	30 k€

N. Pascal (2013)

RESULTS ON POLICY-MAKERS:

- (i) Most economic valuations have mostly been used for “informative” purposes, and mostly been commissioned by public organisations.
- (ii) Effect on policy decisions was varied and, in general, lower than expected,
 - ➡ time span may be too short to accurately evaluate the effectiveness of these studies.

Financing

Costs of achieving Target 11(Aichi) for marine PA
(coverage, connectivity and management)
2013-2020 : US\$ 35 billion

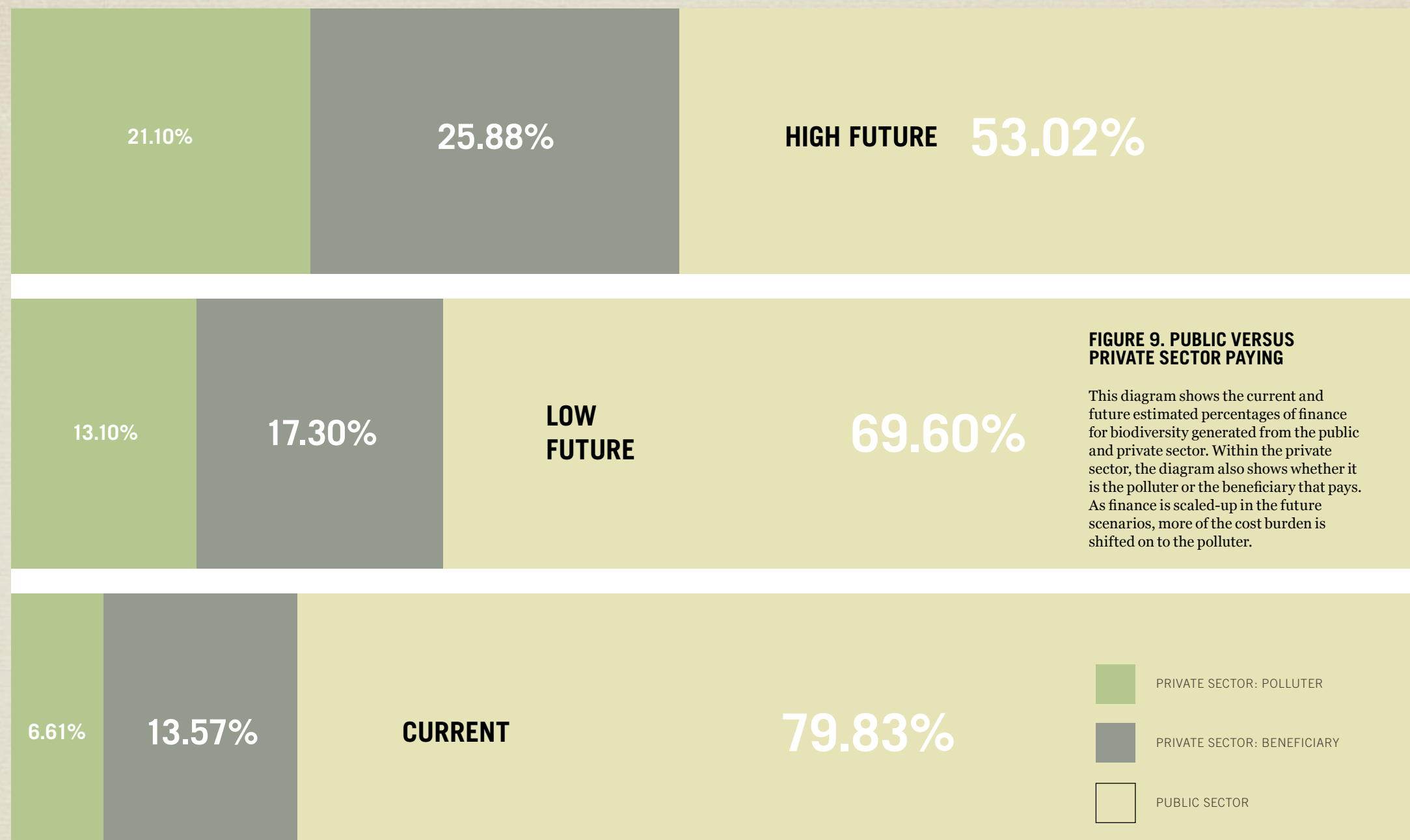
US\$ 17 billion for creating new MPA (\$ 2k/km², 8M km²)

US\$ 7 billion for marine corridors (\$ 1k/km², 7M km²)

US\$ 150 M/y for management of existing MPA (\$ 150/km², 1 Mkm²)

US\$ 1,2 billion/y for management of new MPA (\$150/km², 8M km²)

source: Progress report for the High Level Panel Meeting, CBD 2012



Parker, C., Cranford, M., Oakes, N., Leggett, M. ed., 2012. The Little Biodiversity Finance Book, Global Canopy Programme; Oxford.

Economic instruments for coral reef

~ Beneficiary payers:

Find a buyer and a seller for an ecosystem service

~ Polluter payers:

Contamination tax, compensations

~ Property rights:

Fishing quotas, concessions, easement

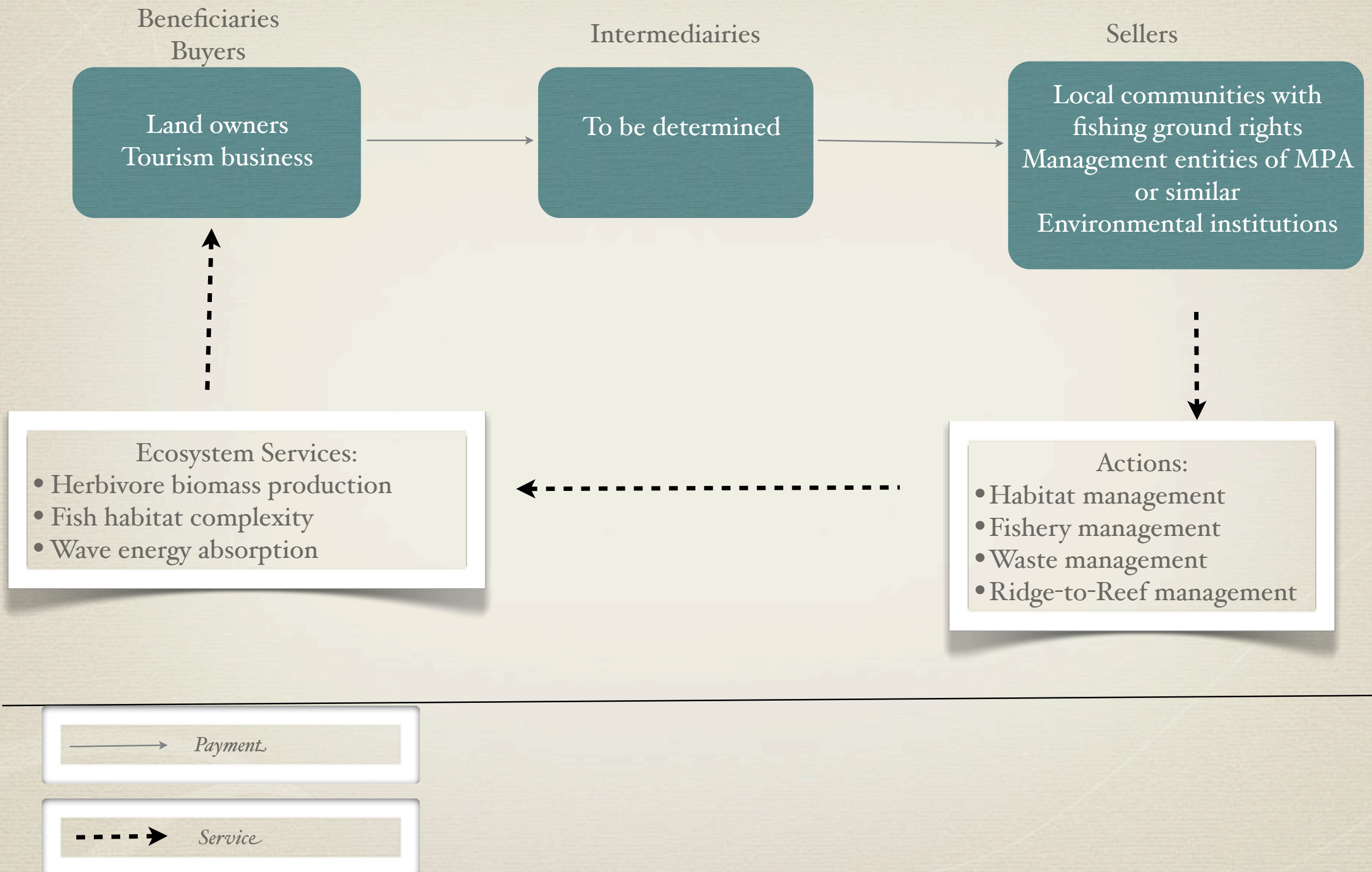
~ Public finance, philanthropy

~ Business plans:

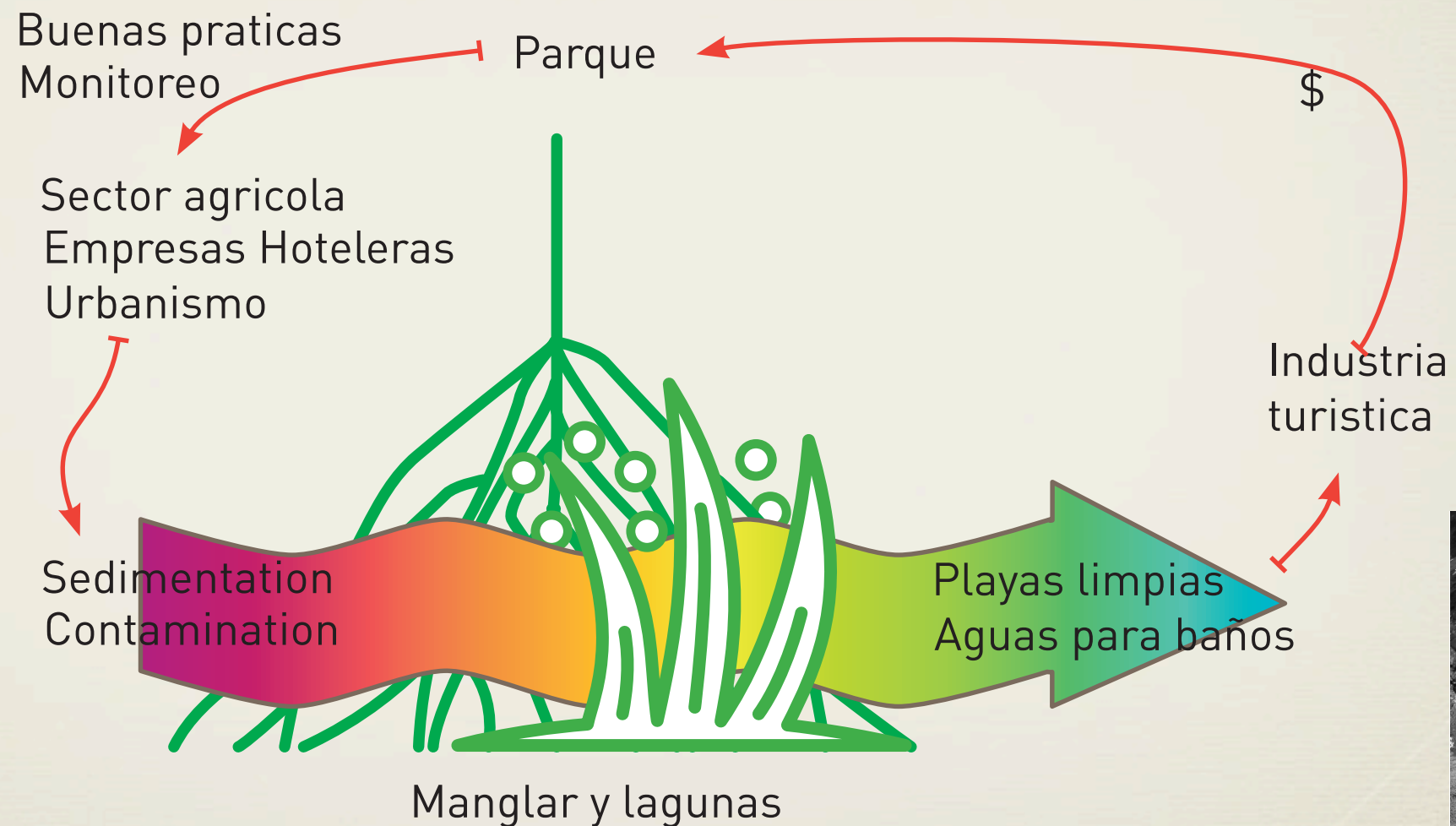
Optimizing costs and revenues of management



Ecosystem service of coastal protection, beach formation and water quality



Sale of the water quality service to tourism businesses:
service of providing clean and uncontaminated beach water to the tourist industry through
the sediment trap and bio-depuration capacities of the mangroves and lagoons.



Need of more pilot sites to test strategies

Some illustrations:

San Andres (Colombia): resort owner investment in beach erosion studies as well as continued PES for beach maintenance

Riviera Maya (Mexico) : Tourism compensating fishers for set-aside areas, landowners paying an NGO to steward marine ecosystems

Jeannette Kawas (Honduras): water quality service to tourism businesses

CHICOP (Tanzania): private financing, public-private partnership

RESCCUE: 6 instruments to be tested in the South Pacific (4 sites) 2014-2018

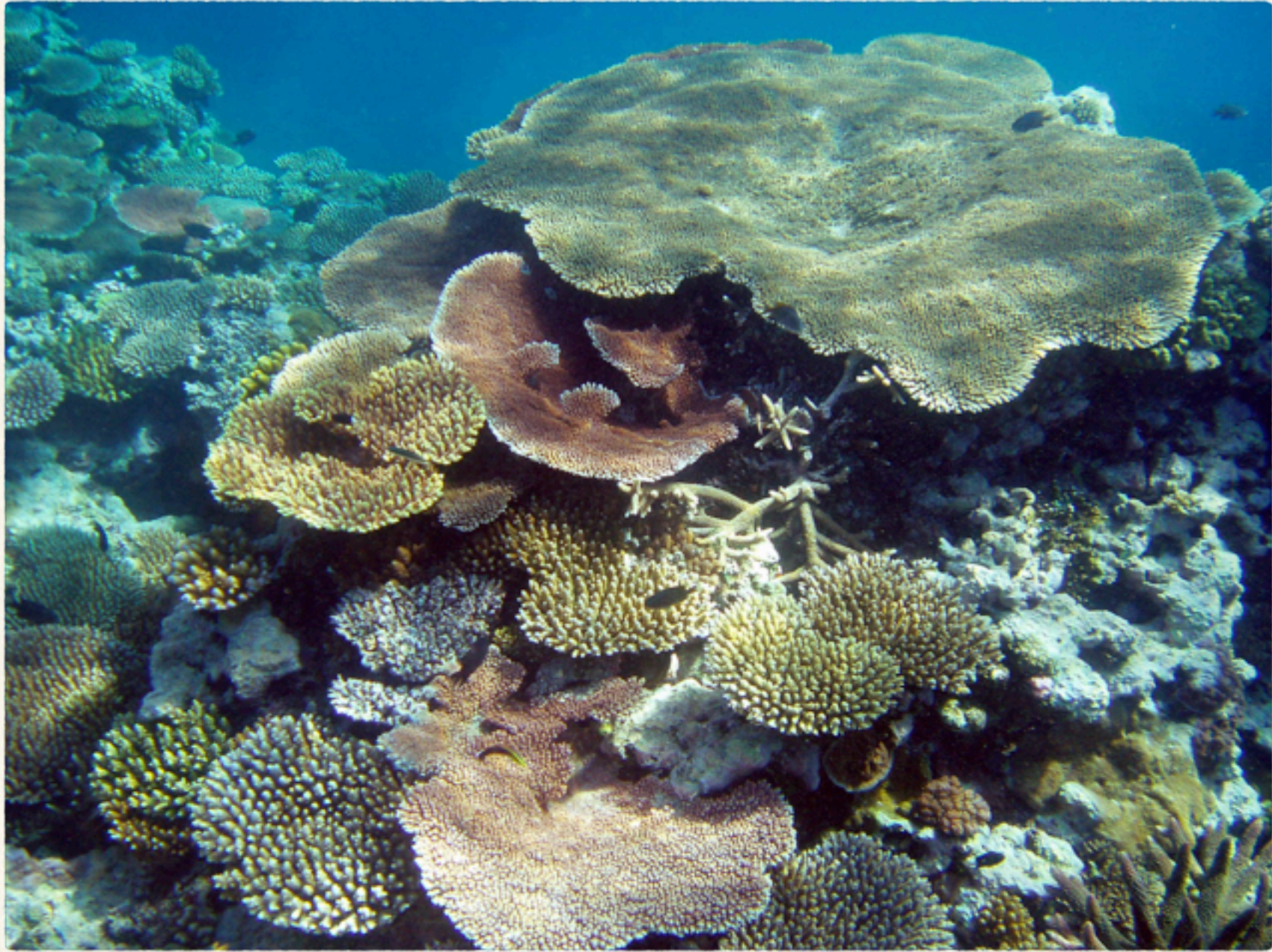
OAS: Reefix: Green tax: Cost recovery mechanisms such as hotel bed tax or tourism tax

Onereef, CI,etc. : conservation agreement for philanthropic sources

Setup of conservation trust funds: park budgets/grants: Comoros, PACT, MARFUND,...

By-side events:

- ✓ Policy guidance pilot sites (WRI) & marine finance pilot sites (IRCP)
- ✓ Caribbean WS (WKICS)



Merci