MACBIO

Marine and Coastal Biodiversity Management in Pacific Island Countries

Valuing and conserving the benefits of marine biodiversity in the South Pacific

Five years of support for integrated ocean governance in Pacific Island Countries

SPREP
Secretariat of the Pacific Regional Environment Programme

IUCN

giz

On behalf of:
Federal Ministry for the Environment, Nature Conservation and Nuclear Safety
of the Federal Republic of Germany

We are the sea,
we are the ocean –
we must wake up
to this ancient truth.

Epeli Hau'ofa
Tongan writer and anthropologist (1939 – 2009)

A secure future for Pacific Island Countries and Territories based on sustainable development, management and conservation of our Ocean.

The Pacific Oceanscape Vision

Blue Economy & Governance

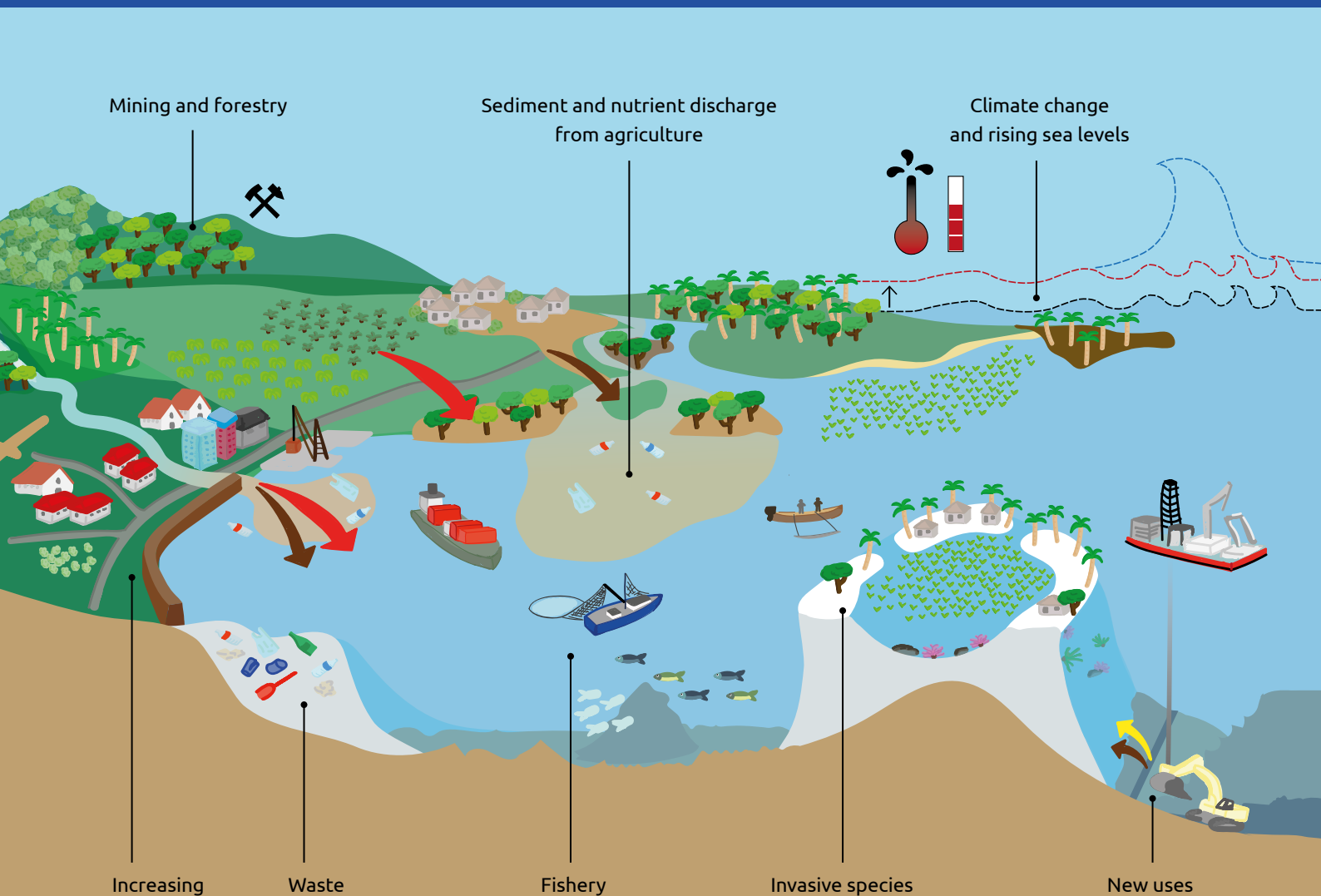
If the ocean was a state of its own, it would be the seventh largest economy in the world – with a "gross marine product" of at least US$ 2.5 trillion per year. This Blue Economy is underpinned by diverse ecosystems that provide valuable services to the world, be it fishing, tourism or shipping.

On the one hand, the ocean is undoubtedly an important part of the world economy. On the other hand, its asset base, that is to say its capital, is steadily declining. This is because the sea is a commons. A large number of countries and stakeholders have a share in the Blue Economy and benefit from the dividend. But without sustainable management, the "capital stock" is sooner or later exhausted.

To address this, there are a multitude of policies and regulations governing the different uses of the ocean. However, at present these are mostly limited to certain sectors, such as fishing, tourism or shipping. This one-dimensional approach often leads to conflicts between the different uses, sectors and stakeholders. The bottom line is that everyone is losing – and the marine capital is shrinking. The answer to this is holistic, integrated ocean governance. The vision of a Blue Economy can only be successfully implemented and managed with cross-sectoral, transboundary and participatory approaches. Uses, conflicts and management can only be harmonized using new complementary tools and strategies. A core tool for this is Marine Spatial Planning.

As part of this effort, global commitments such as the Aichi Biodiversity Objectives[1] and the Sustainable Development Goals need to be integrated into regional and national approaches. For the South Pacific this means translating strategies such as the Pacific Oceanscape Framework and regional ocean policies into national approaches, which in turn holistically encompass not just coastal regions but also the exclusive economic zones of each Pacific Island nation. This way, the "blue capital" can be preserved and increased for future generations, maximizing the profit and benefit from the Blue Economy for all Pacific Islanders.

1 Named after the Japanese prefecture of Aichi, where these goals for the implementation of the UN Convention on Biodiversity were formulated in 2010.


Mining and forestry
Sediment and nutrient discharge from agriculture
Climate change and rising sea levels
Increasing coastal zone development
Waste management
Fishery
Invasive species
New uses

Sustainable use of the marine capital

The Pacific Island states are often referred to as “Small Island States”. However, 98 percent of the territory of the five MACBIO project countries is sea. This makes them “Big Ocean States”. Their combined exclusive economic zone covers 7.5 million km² – 21 times the area of Germany.

And here, underwater, is also where the majority of the resources and biodiversity of these countries can be found, including its cultural, social and economic value. Yet, until recently, national development and conservation planning in these maritime nations has largely focused on land, and was narrowly focused on individual sectors. An alternative concept is the integrated management and governance of marine resources. This can bring significant economic, social and conservation benefits.

Against this backdrop, the MACBIO project supported the implementation of national biodiversity strategies and targets of five pacific partner countries (highlighted in the map, below) within the framework of the United Nations Convention on Biodiversity’s Strategic Plan for Biodiversity 2011–2020, as well as the Sustainable Development Goals (SDGs) and the Pacific Oceanscape Framework.

In this context, GIZ cooperates closely with the International Union for Conservation of Nature (IUCN) and the Secretariat of the Pacific Regional Environment Programme (SPREP).

Valuing
Planning
Managing

MARINE ECOSYSTEM SERVICE VALUATION

The valuation of marine and coastal ecosystem services enables the integration of results into national development planning and promotes intersectoral planning approaches.

MARINE SPATIAL PLANNING

An improved national awareness of the value of marine resources motivates the partner countries to

→ collect and analyse spatial data on the use of marine resources,
→ build capacities for national sustainable development planning,

for partner countries to benefit sustainably from their marine and coastal ecosystems.

EFFECTIVE MANAGEMENT

The documentation of approaches of sustainable management and conservation of marine resources supports a variety of stakeholders such as village communities, NGOs and universities in disseminating and replicating best practices and tools in partner countries and throughout Oceania.

Valuing

MILESTONES

- Five national marine ecosystem service valuation studies & reports
  - Short summaries
  - White papers
  - Infographics
  - Interactive and audiovisual tools
- Fact sheets on marine ecosystem service valuation
- Manual on marine ecosystem service valuation, tailored to the SW Pacific
- Regional networks and expert register

KEY MESSAGES

Marine ecosystem services

- are often initially not fully visible or are not recognised,
- can reach the level of national GDP values and
- must be sustainably used, managed and conserved.

More at **http://macbio-pacific.info/marine-ecosystem-service-valuation/**

Five national marine ecosystem service valuation studies & reports

Infographic on the results of the marine ecosystem services valuation in Fiji

Planning

MILESTONES

- Compilation of global, regional and national marine data for improved national access
- Five national policy reviews on marine biodiversity
- Four national reviews of the relevant legal situations
- Four national inventories of special and unique marine areas
- National frameworks for protected area planning
- National Marine Atlas series
- National and regional communication material
- Support and training of national users in licence-free Geographic Information Systems
- Description of marine bioregions to identify ecologically representative networks of Marine Protected Areas (MPAs) at national scales

KEY MESSAGES

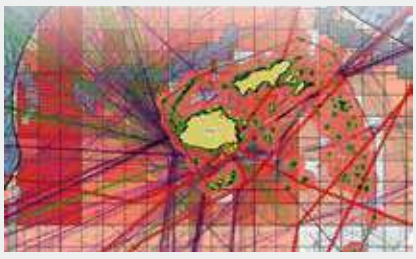
With technical and financial support, the implementation partners of the regional MACBIO project have initiated effective processes for national Marine Spatial Planning.

Marine Spatial Planning is an

- integrated and participatory planning tool
- that seeks to balance ecological, economic and social objectives
- aiming for sustainable marine resource use and promoting the vision of an environmentally-friendly Blue Economy.

More at
http://macbio-pacific.info/marine-spatial-planning/

The QBook is a regional online training platform for open-source spatial planning software.



The national Marine Atlas illustrates the value of marine biodiversity and the great benefit of Marine Spatial Planning for Fiji in a vivid and interactive way.

Managing

MILESTONES AND EXAMPLES

→ **Regional level**
- Support for the Pacific Islands Roundtable for Nature Conservation and Protected Areas
- Support for the SPREP Pacific Climate Change Portal

→ **Country level**
- Country-wide, participatory Ocean Policy consultations in Vanuatu
- Lessons Learned Conference on Special Managed Areas in Tonga
- Support for the use of smartphone apps in marine resource management in Kiribati

→ **Province level**
- Mapping of multi-level governance structures and identification of existing bottlenecks in Kadavu, Fiji

→ **Local level**
- Review of the Arnavon Community Marine Conservation Area in the Solomon Islands
- Lessons learned from the management of the Fijian Great Sea Reef – Macuata, Fiji
- Success stories of local marine management from Navakavu, Fiji

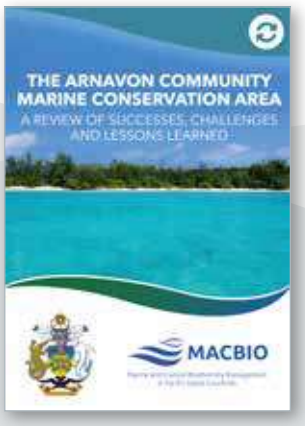
KEY MESSAGES

MACBIO has helped various stakeholders to independently document and disseminate their successes and experiences.

As an alternative to traditional pilot projects, the project helped countries share and adopt existing successful examples of marine management – and be an inspiration for the region.

More at
http://macbio-pacific.info/effective-management/

Support for the use of smartphone apps in marine resource management



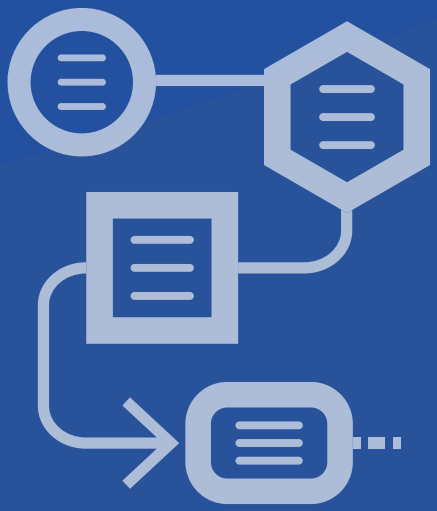
Analysis of the Arnavon Community Marine Conservation Area in the Solomon Islands and communication of the results

Assisting island countries

MACBIO set out to assist Big Ocean States to meet their international, regional and national biodiversity targets. Since 2013, the five countries have achieved and shared many successes in marine management.

But more importantly: They have embarked on a journey to more sustainably manage their valuable marine resources.

In this way they commenced continuing national processes to plan the uses of their marine resources, to avoid conflicts and to maximize their benefits.



Fiji

2005 and 2014

Fiji committed to designate 30 percent of its Exclusive Economic Zone (EEZ) as Marine Protected Areas by 2020

2014 – 2016

130

marine spatial data sets collected and made accessible

2015

Typology for Marine Protected Areas drafted

2015

Vision and objectives for Fiji's 30 % of the EEZ network of Marine Protected Areas defined

2016

National Marine Ecosystem Service Valuation report launched

2016

Analysis of 85 legal instruments as a basis for Marine Protected Areas published

2016

Biophysically Special and Unique Marine Areas identified

2016

Regional and national description of marine environment through marine bioregions developed

2017

At the UN Ocean Conference, Fiji

17

voluntary commitments towards marine protection and sustainable management, including a national network of marine managed areas

2018

Guidelines for the placement of Marine Protected Areas developed

2018

Report on Fiji's Biophysically Special, Unique Marine Areas with over 80 sites published

2018

Typology for Marine Managed Areas published

2018

Report on an ocean-wide description of Fiji's marine environment (into 27 marine bioregions) published

2018

First round of national public consultations to identify candidate sites for Marine Protected Areas initiated – Government process

2019

Second round of National Public consultations to review candidate MPA sites, including candidate sites for national MPA network – Government process

2020

Adoption and establishment of the national Marine Protected Areas network – Government process

Solomon Islands

2014 – 2016

65

spatial data sets collected and made accessible

2015

Through the Prime Minister's Office and Cabinet, the Solomon Islands government hosted the inaugural Ocean Summit, attended by 12 Ministries (Ocean12)

2015

Marine Ecosystem Service Valuation launched

2016

The Cabinet decided to establish the Oceans 12.

2016

Technical working group established, to carry out tasks under the leadership of the Ocean12

2016

Ocean12 Steering Committee established, with the Permanent Secretaries of the 12 Ministries

2016

Analysis of the legal basis for Marine Protected Areas published

2017

Technical Working Group defined a national approach for Integrated Ocean Governance with five priorities:

→ national ocean policy,
→ Marine Spatial Planning,
→ adaptation of national legislation,
→ supportive capacity building and
→ sustainable funding

2017

Analysis of the Arnavon Community Marine Conservation Area published

2017

Special and Unique Marine Areas identified and mapped

2017

The Ocean12 working group supports the delegation of the UN Ocean Conference in the submission of voluntary commitments to a national ocean policy and Marine Spatial Planning by 2020

2017

National consultation strategy defined

2018

Marine bioregions drafted

2018

Ocean12 Chairs committed to formulate and launch a National Ocean Policy by the end of the 2018

Kiribati

2014

Country-wide workshop on marine ecosystem services valuation with key stake-holders conducted

2014

Introduction of the Marine Spatial Planning process and discussion with government representatives

2015

Analysis of existing area-based marine management tools completed

2015

over

100

open marine spatial data sets and customized maps made available and distributed to key stakeholders and ministries

2015

Training conducted on open source software for Geographic Information Systems (GIS)

2015

Follow-up discus-sions on the Marine Spatial Planning process held

2016

Marine ecosystem services valuation published

2016

Introduction of the concept of a nationwide Marine Atlas

2017

Dialogue between government agencies on ocean governance, Marine Spatial Planning and voluntary commitments ahead of the UN Ocean Conference conducted

2017

Government endorsed atoll scale Marine Spatial Planning to be formulated for Tarawa and Kiritimati Island

2017

First Marine Spatial Planning workshop and GIS capacity training for key government officials in Tarawa carried out as a basis for Marine Spatial Planning in Tarawa

2017

Marine ecosystem services valuation officially presented by the Ministry of the Environment and published on the front page in the local newspaper "Uekera"

2017

Cabinet memorandum on officiating the Marine Spatial Planning process for Tarawa and Kiritimati submitted and approved by the Cabinet

2018

Initiation of the spatial planning process in Kiritimati

Tonga

2015

Cabinet decides to introduce cross-sectoral, national Marine Spatial Planning

2015

In its first meeting, the technical working group Ocean7 agrees on terms of reference, a vision and goals for Tonga's Marine Spatial Planning and a work plan until 2020

2015 – 2017

Collection and processing of over

140

spatial datasets, including environmental, usage and risk data

2016

Analysis of

91

instruments for assessing the legal basis of Marine Spatial Planning

2016

Marine ecosystem services valuation published

2017

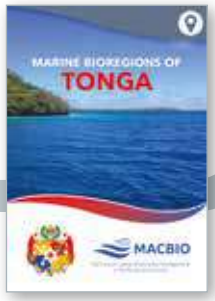
Typology of ocean management areas for Tonga is defined

2017

Tonga's voluntary commitments to the UN Ocean Conference include Marine Spatial Planning and a network of 30 percent of the EEZ as Marine Protected Areas by 2020

2017

Deputy Prime Minister presented Report, defining 38 biophysically Special and Unique Marine Areas



2018

Report on the 25 marine bioregions, which describe Tonga's entire marine environment, published

2018

Placement guidelines for ocean management areas drafted

2018

Communication material for national consultations on Marine Spatial Planning drafted

Vanuatu

2012

Government hosted a national workshop on Ocean Governance, recommending the development of a national Ocean Policy and Marine Spatial Planning

2014 – 2016

127

spatial data sets collected and made accessible

2014 – 2015

The Minister of Foreign Affairs established the Subcommittee on Ocean Policy in order to deliver on an Ocean Policy and national Marine Spatial Planning

2015

Proposed Ocean Policy was fundamentally revised on the basis of contributions from national consultations

2015

National consultations on the proposed Ocean Policy held in 32 locations with more than

1,000

participants

2015

Analysis of the legal basis for Ocean Policy and Marine Spatial Planning

2016

Council of Ministers approved the revised Ocean Policy

2017

Marine ecosystem services valuation published

2017

At the UN Ocean Conference, Vanuatu announces its intentions to have in place, by 2020, a national Marine Spatial Plan including a national ecologically-representative network of Marine Protected Areas and a National Oceans Office

2017

Acting Prime Minister launched the Ocean Policy at the first national ocean summit

2017

Start of the implementation of the National Ocean Policy and Marine Spatial Planning

2017

Workshop on the description of the ocean zones to be used in the process of Marine Spatial Planning

2017

National experts described

109

biophysically Special and Unique Marine Areas for Vanuatu

2018

Marine specialists defined marine bioregions for the entire marine environment of Vanuatu

Output stats

Selected examples, as of 03/2018

DATA

354 marine spatial data sets collected and made accessible

4,839 scientific studies and reports documented and explored

150 different Marine Economic Values identified

532 legal documents analysed and made available

SERVICES

105 publications produced and strategically disseminated

2,946,736,754 $ total value of marine ecosystem service value described (2013 US $ equivalent)

> 160 Special and Unique Marine Areas identified

102 reef-associated bioregions in the Southwest Pacific Ocean described by analysing species data from **6,500** sites

262 deep-sea bioregions in the Southwest Pacific Ocean described by analysing data allocated to over **140,000** grid cells of 20 × 20 km

165 marine atlas maps and narratives created

EVENTS

>70 technical workshops carried out or substantially contributed to

> 200 presentations, attendances or sponsorship of partners' attendance at national, regional and international conferences and workshops

> 150 technical support, training and planning missions done by MACBIO staff

1,165 stakeholders in 34 locations consulted for the Vanuatu Ocean Policy

Impact stats

Selected examples, as of 03/2018

MAINSTREAMING

> 50 mentions of the project results in national and international press, policy papers and scientific publications

> 17,000 regional and international visits to the MACBIO website, with 15 percent mobile users

PROVIDING A FRAMEWORK

5

nationwide Marine Spatial Planning processes initiated and supported

SUSTAINABILITY

Active network with

5 partner countries

3 implementation partners and

> 46 partner organisations in marine management established and institutionally supported

> 2,000 views, over 300 active users and seven involved partner organisations of the open-source GIS training platform QBook from across the region

GENDER

42%

female participants in MACBIO workshops and trainings

Working together

International team

Implementing partners

SPREP
Secretariat of the Pacific Regional Environment Programme

IUCN

giz

On behalf of:
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Further partners

Legal notice

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macbio-pacific.info
macbio@giz.de
@MacbioNews
MacbioPacific

Project director: Jan Henning Steffen
Project Senior Advisor: Leanne Fernandes


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