Sub-regional Analysis of the Status of Aichi Biodiversity Target 11

Capacity-building workshop for the Pacific on achieving Aichi Biodiversity Targets 11 and 12
Nadi, Fiji

Dr. Sarat Babu Gidda

Convention on Biological Diversity

11 July 2016

Explanation of the Elements of Aichi Biodiversity Target 11

By 2020,

at least 17 % of terrestrial and inland water areas, and 10 % of coastal and marine areas,

... especially areas of *particular importance for biodiversity and ecosystem services,*

... are conserved through ... protected areas that are...

... effectively and equitably managed,

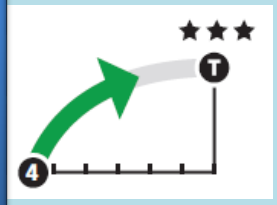
... ecologically representative,

... well connected systems, integrated into the wider landscapes and seascapes,

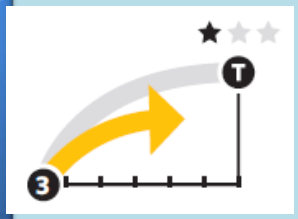
... and other effective area-based conservation measures

Status of Aichi Biodiversity Target 11

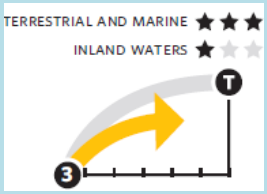
17 per cent of terrestrial and inland water are protected, and 10 per cent of coastal and marine areas are protected



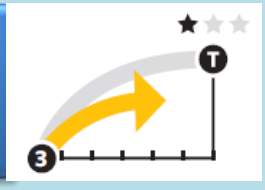
Protected areas are well connected and integrated into the wider landscape and seascape



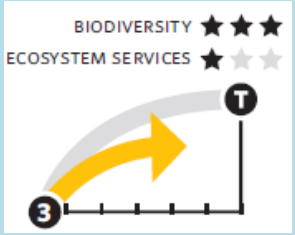
Protected areas are ecologically representative



Protected areas are effectively and equitably managed



Areas of particular importance for biodiversity and ecosystem services are protected



Development of Protected Areas Country Data Dossiers

184 country dossiers

Information available from BirdLife International, the Digital Observatory for Protected Areas, and the World Database of Protected Areas.

- **Terrestrial and Marine Ecoregions**
- **Important Bird and Biodiversity Areas**
- **Alliance for Zero Extinction Sites**
- **Overlaps between unprotected and partially protected IBAs and AZEs and candidate ER for further protection**
- **Actions identified in their PoWPA Action Plan, Fifth National Report, or NBSAP**
- **Protected areas are ecologically representative**
- **Allocation and utilization of their Fifth and Sixth replenishment of the Global Environment Facility (GEF)**

Dossiers have helped to compile the regional, sub-regional and global-level status of the target

FIJI – Country Data Dossier for Protected Areas Summary Sheet

Estimated current PA coverage (Source: DOPA, see footnote on next page)

93.27% Terrestrial (17 148 km²)

20.81% Marine (262 374 km²)

Terrestrial and Marine Ecoregions

Out of 2 terrestrial ecological regions:

- 2 ecological regions (Fiji tropical moist forests, Fiji tropical dry forests) are the highest priority candidate sites for further protection.

Important Bird and Biodiversity Areas (IBAs)

Fiji has 13 IBAs: 11 IBAs have no protection, 2 IBAs have partial protection.

Bringing some IBAs that have no protection or having partial protection under protected areas and improving the management effectiveness of all IBA PAs are priority actions.

Alliance for Zero Extinction Sites (AZEs)

Fiji has 5 AZEs: 3 AZEs have no protection, 2 AZEs have partial protection.

Bringing some AZEs that have no protection or having partial protection under protected areas and improving the management effectiveness of all AZEs are priority actions.

Overlaps between unprotected and partially protected IBAs and candidates Ecoregions for further protection

There are 16 overlaps between IBAs and ecoregions (16 terrestrial) whose further protection is a priority action.

Overlaps between unprotected and partially protected AZEs and candidates Ecoregions for further protection

There are 4 overlaps between AZEs and ecoregions (4 terrestrial) whose further protection is a priority action.

STAR GEF-5 Allocation and Utilization

All focal areas are still within budget for Fiji. Allocation not utilized is 2 USD.

STAR GEF-6 Allocation and Utilization

Total Biodiversity GEF-6 Allocation is 4,936,768 USD. Allocation remaining to be programmed is 936,768 USD. For undertaking implementation of the identified actions above, countries can request the use of their GEF-6 allocations, as agreed upon in COP 11 decision XI/24 paragraphs 1 (a) (b) (g) and paragraph 3. Specifically, in BD1 "Improving Sustainability of Protected Areas Systems", both Program 1 "Improving Financial Sustainability and Effective Management of the National Ecological Infrastructure" and Program 2 "Nature's Last Stand: Expanding the Reach of the Global Protected Area Estate" as well as in BD2 "Reduce Threats to Globally Significant Biodiversity", Program 3 "Preventing the Extinction of Known Threatened Species".

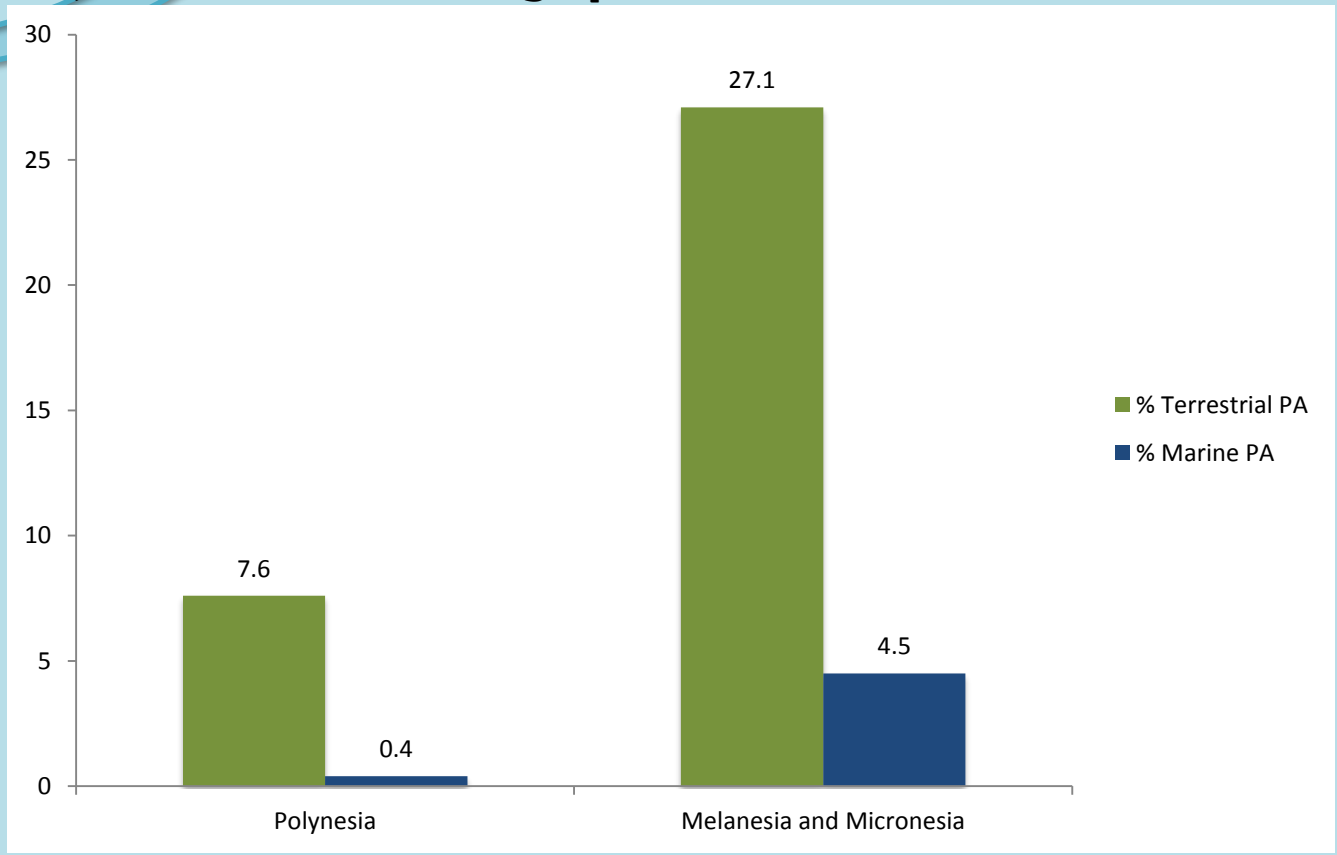
Target 11- Quantitative Aspects

17% terrestrial and 10 % of coastal and marine areas ?

Percentage of Protected Areas in Micronesia, Melanesia and Polynesia

By 2020, (globally)

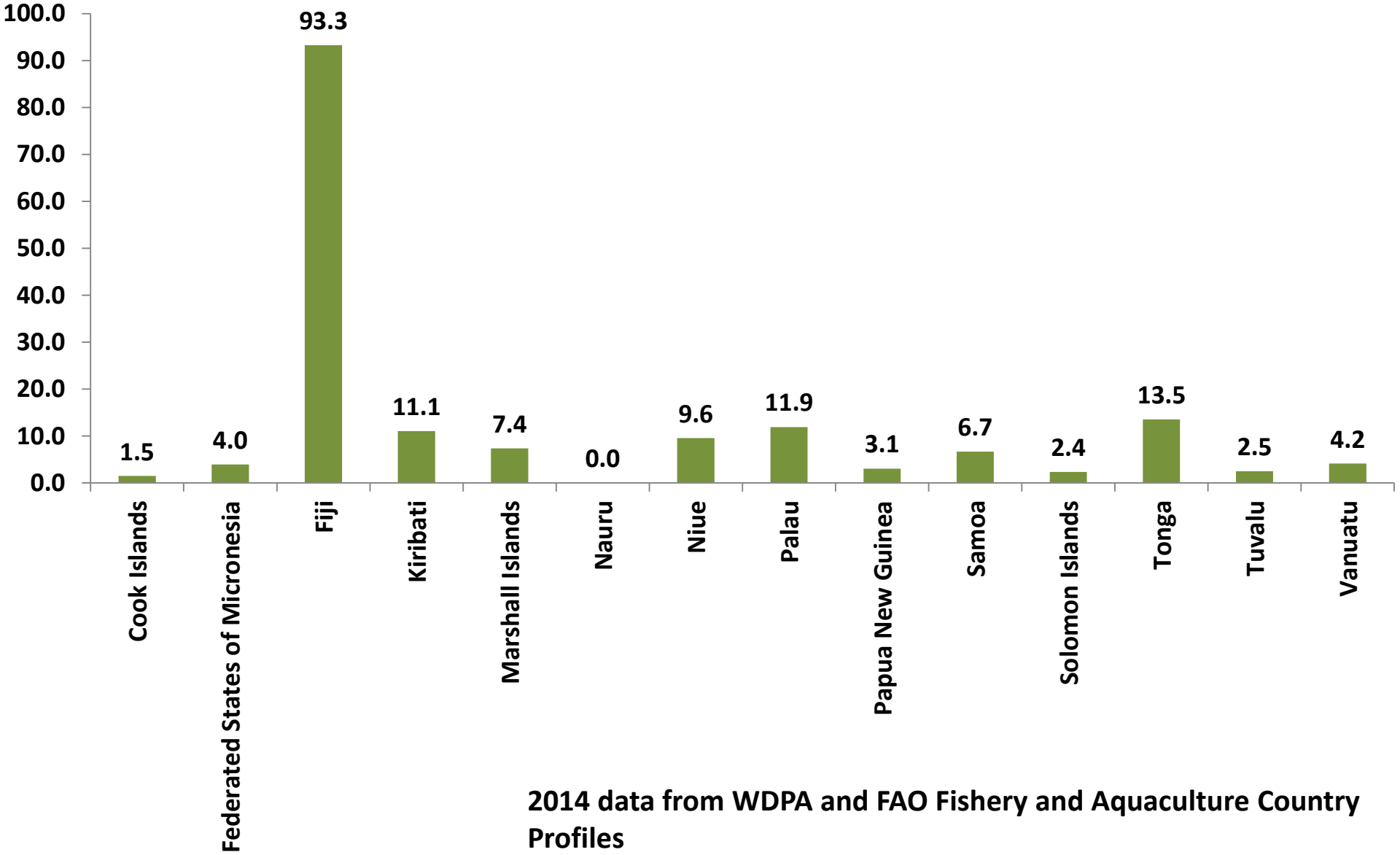
at least 17 % of terrestrial and inland water areas, and 10 % of coastal and marine areas, are conserved through protected areas



National targets should be accumulative to reach global target

2014 data from WDPA and FAO Fishery and Aquaculture Country Profiles

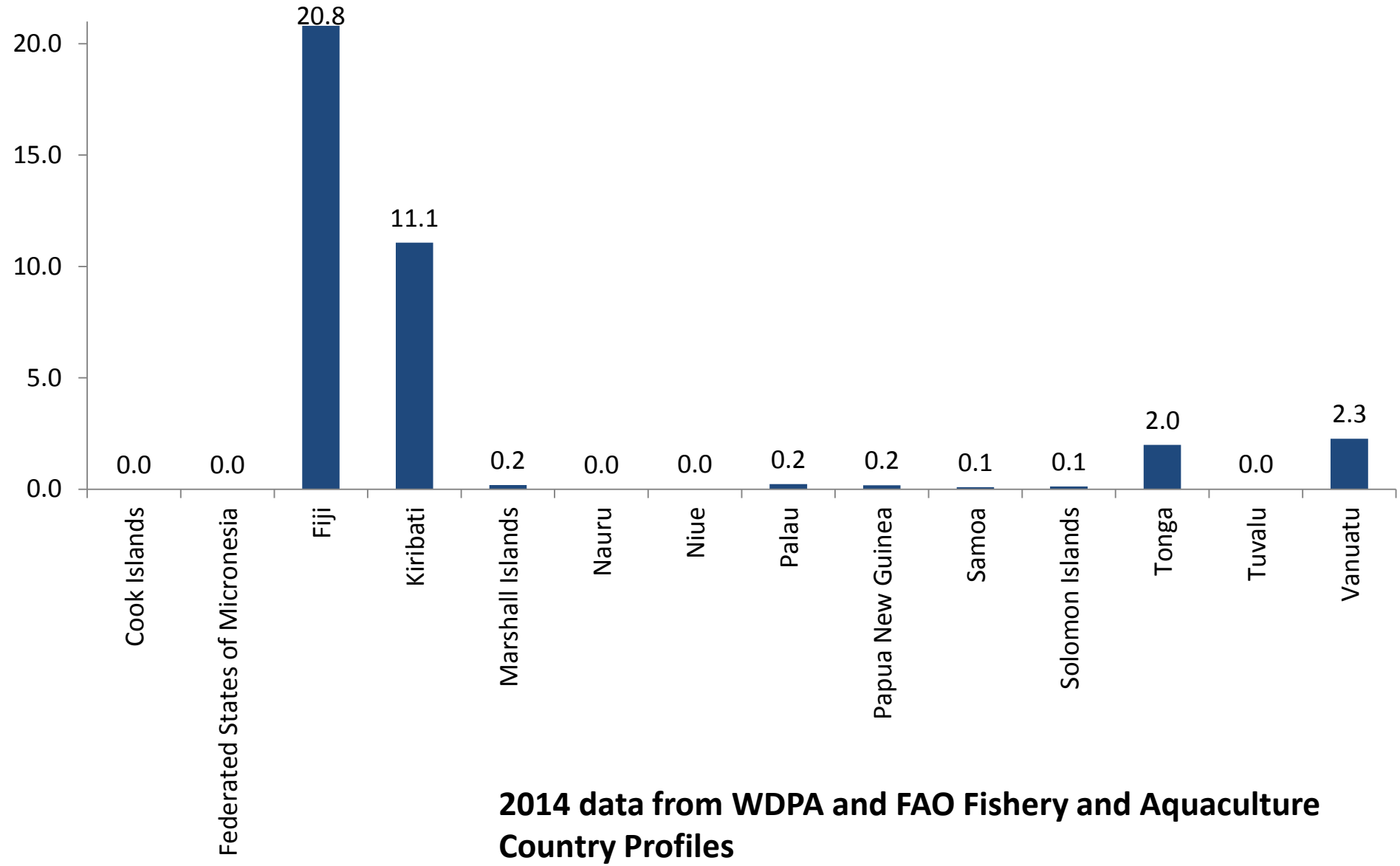
Percentage of terrestrial protected areas in Micronesia, Melanesia and Polynesia



2014 data from WDPA and FAO Fishery and Aquaculture Country Profiles

Percentage of marine protected areas in Micronesia, Melanesia and Polynesia

EEZ up to 200 nautical miles



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Explanation of the Elements of Aichi Biodiversity Target 11

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Areas of particular importance for biodiversity

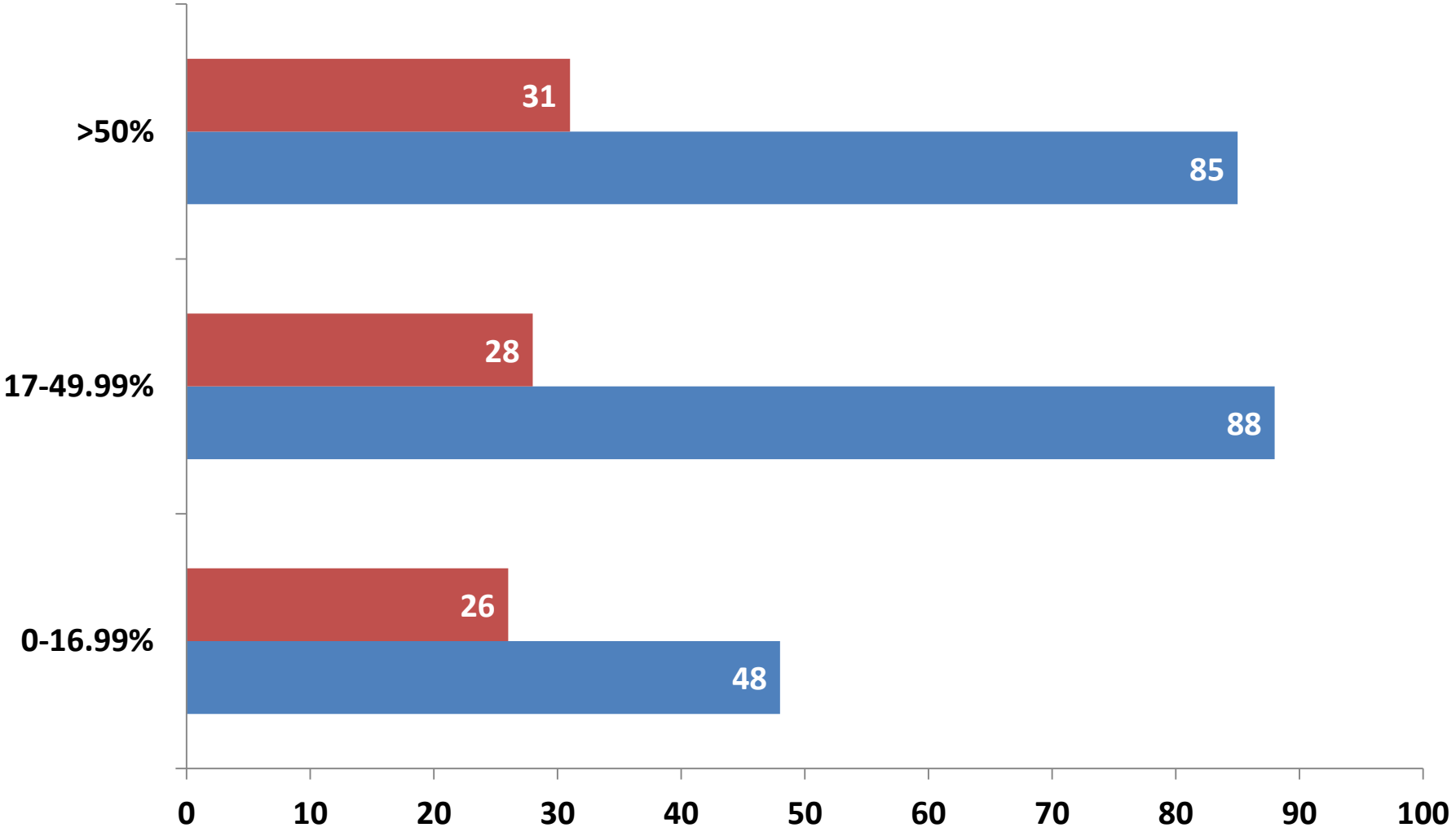
What are areas of particular importance for biodiversity?

Key Biodiversity Areas (KBAs)

- **Important Bird Areas**
- **Important Plant Areas**
- **Alliance for Zero Extinction sites**
- **Areas rich in wild relatives of crops**

Vulnerability and Irreplaceability

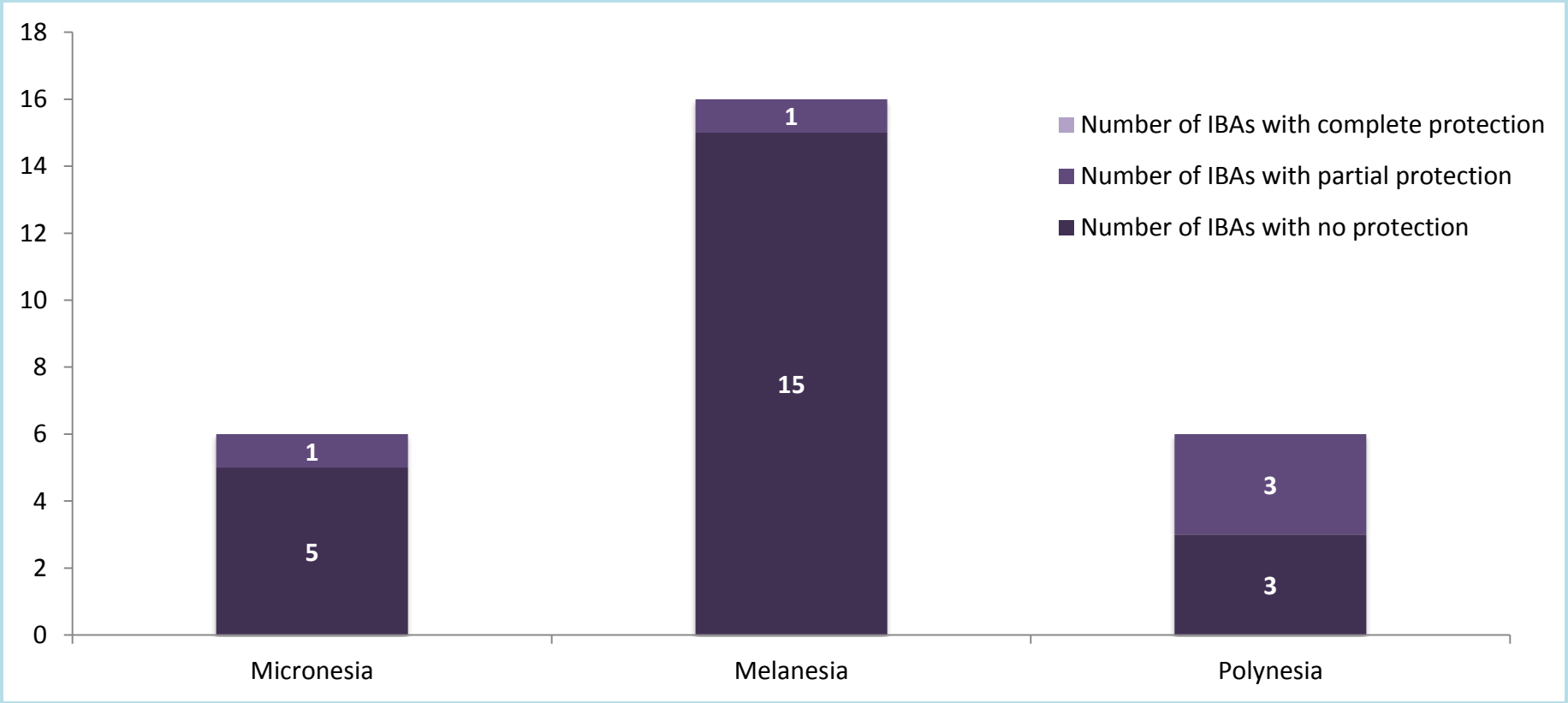
Number of countries with different levels of protected area coverage for Alliance for Zero Extinction Sites (red) and Important Bird and Biodiversity Areas (blue)



Protection Status of Important Bird and Biodiversity Areas (IBAs) in Micronesia, Melanesia and Polynesia

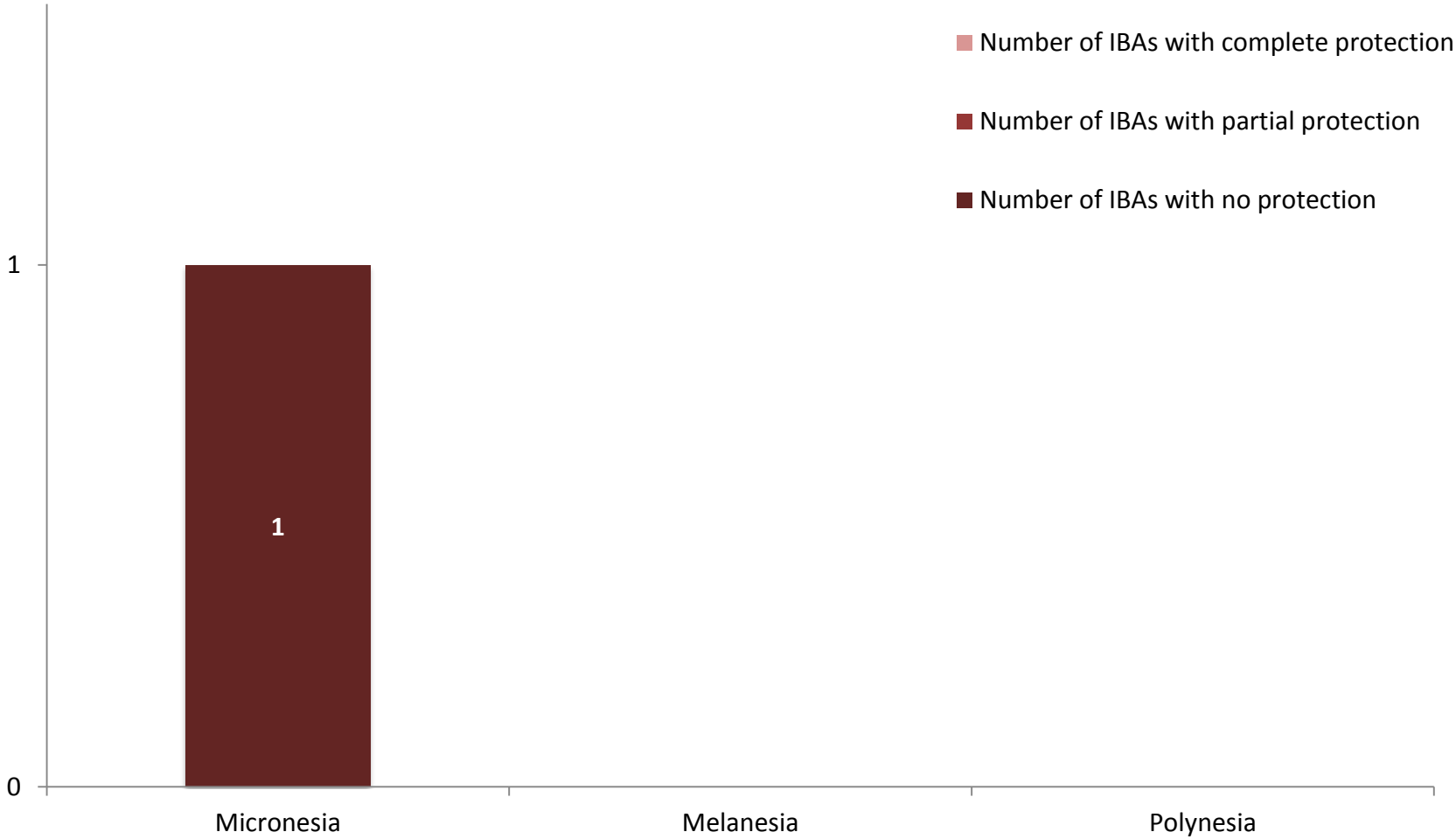
By 2020,

areas of *particular importance for biodiversity and ecosystem services*, are conserved

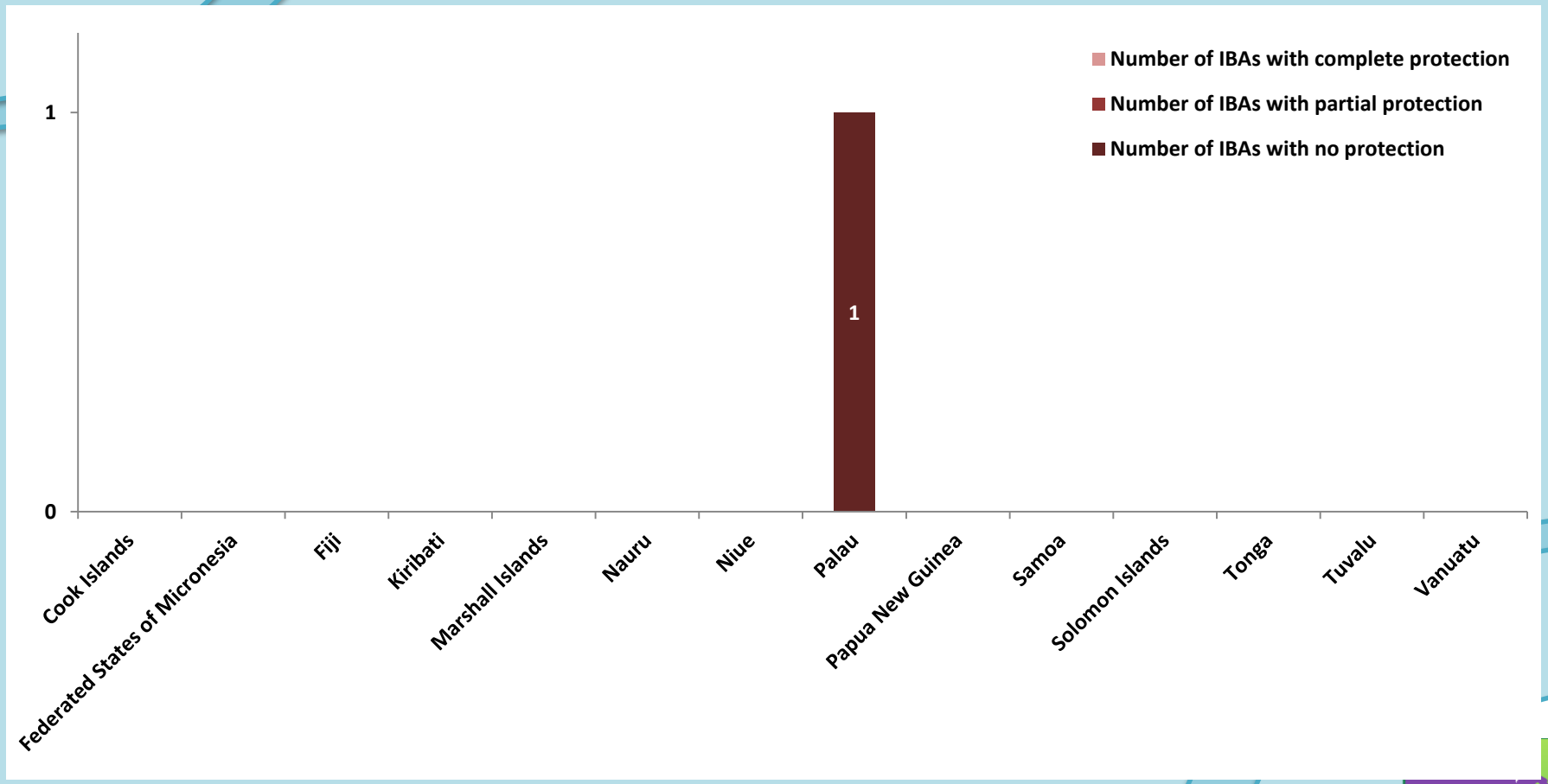


Protection Status of Important Bird and Biodiversity Areas (IBAs) in Micronesia, Melanesia and Polynesia

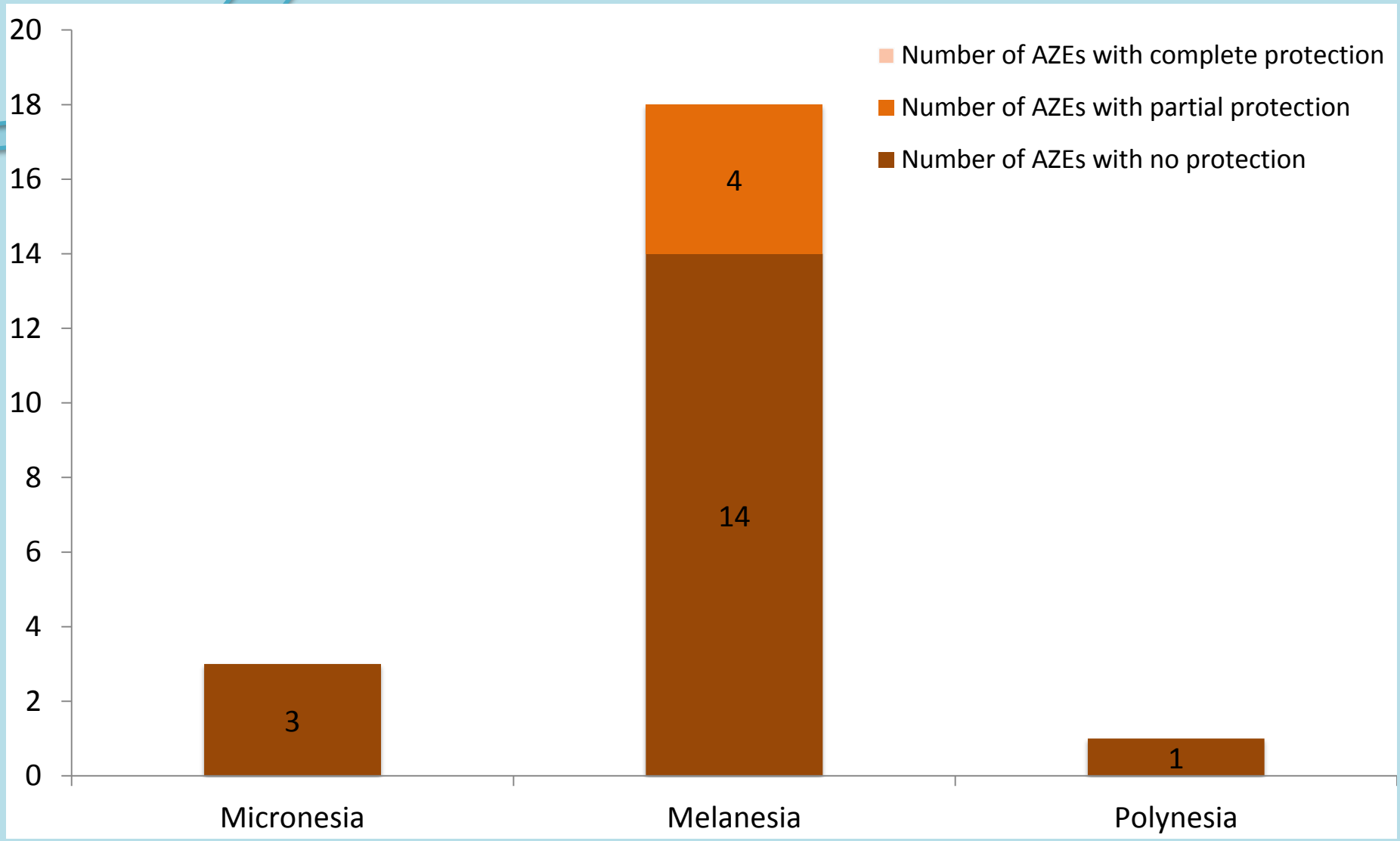
Protection Status of Important Bird and Biodiversity Areas (IBAs) in danger in Micronesia, Melanesia and Polynesia



Protection Status of Important Bird and Biodiversity Areas (IBAs) in danger in Micronesia, Melanesia and Polynesia



Protection Status of Alliance for Zero Extinction Sites (AZEs) in Micronesia, Melanesia and Polynesia



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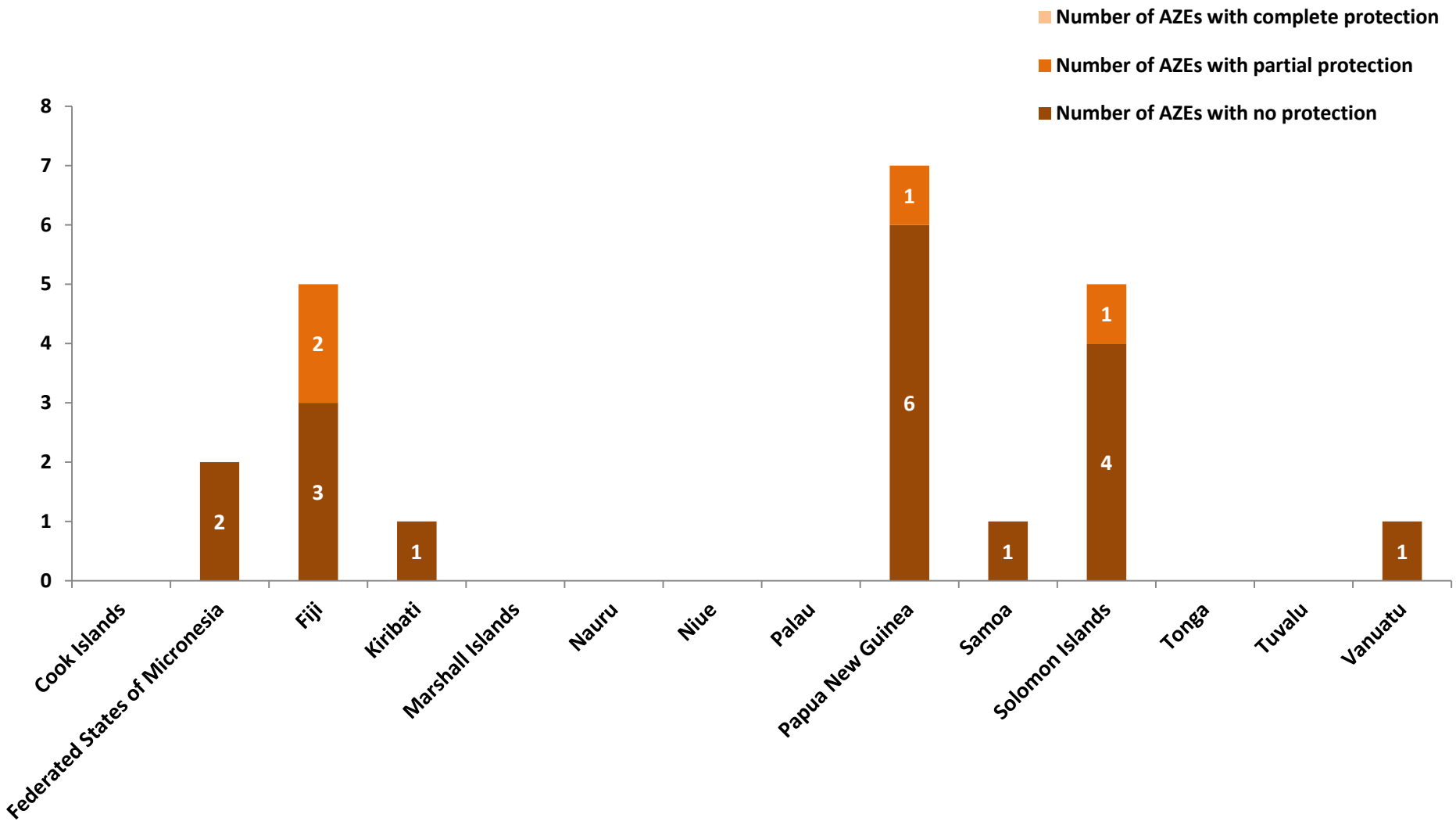
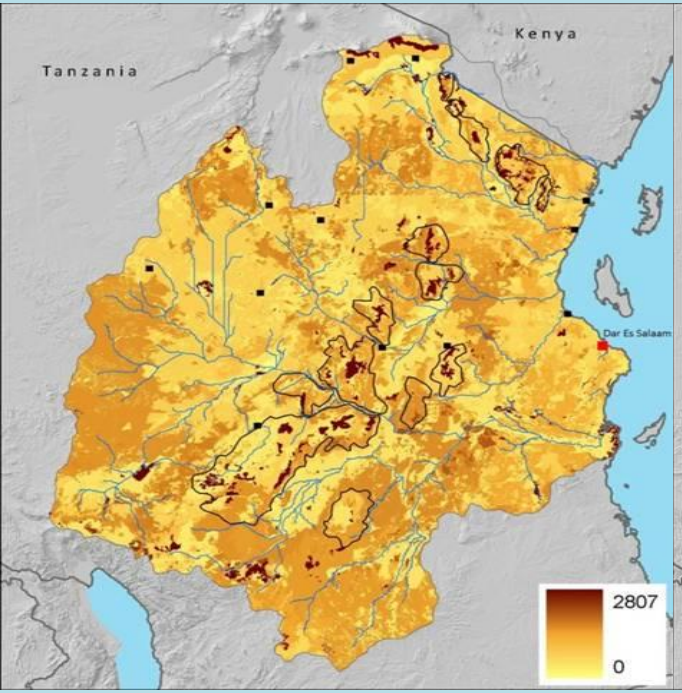
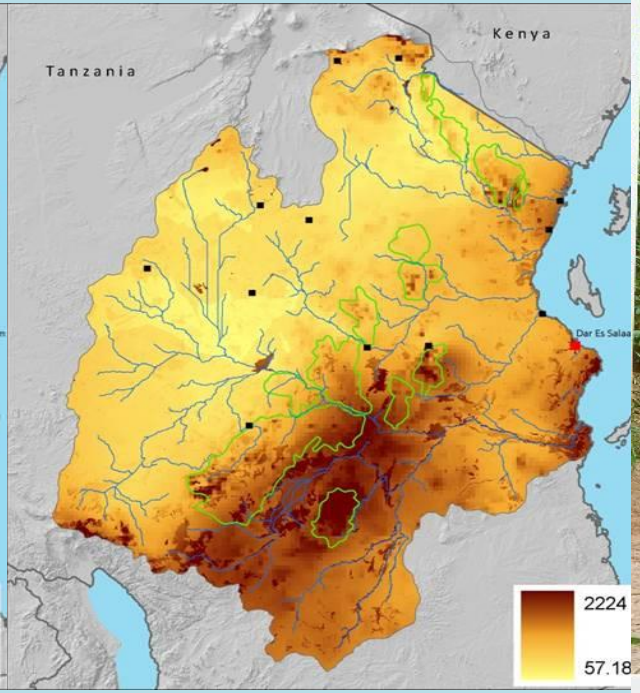


Ecosystem services of Protected Areas

- Water security
- Food and health security
- subsistence, livelihoods
- CC adaptation & mitigation





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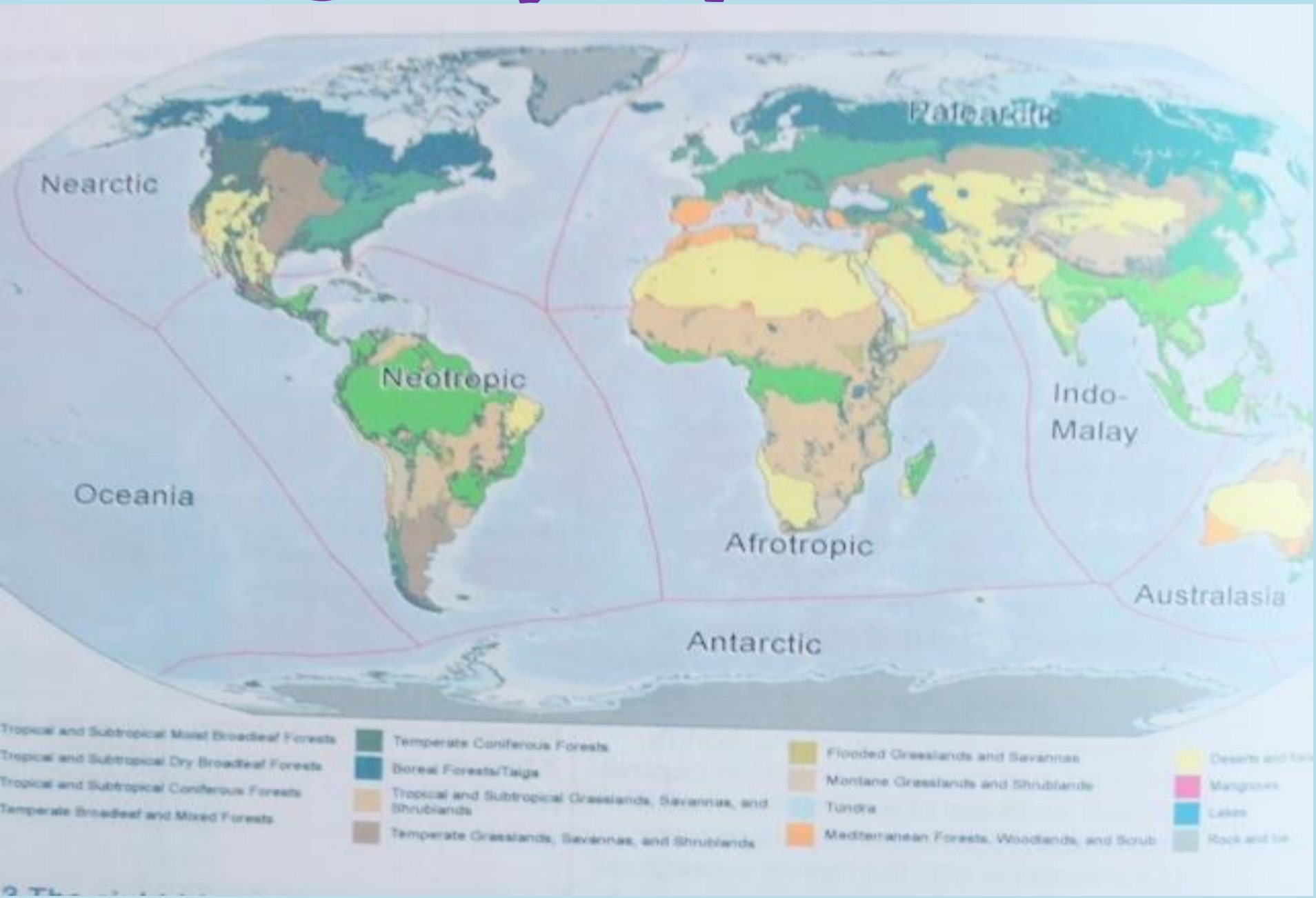
Ecologically Representative



Ecological Gap Assessment Fiji

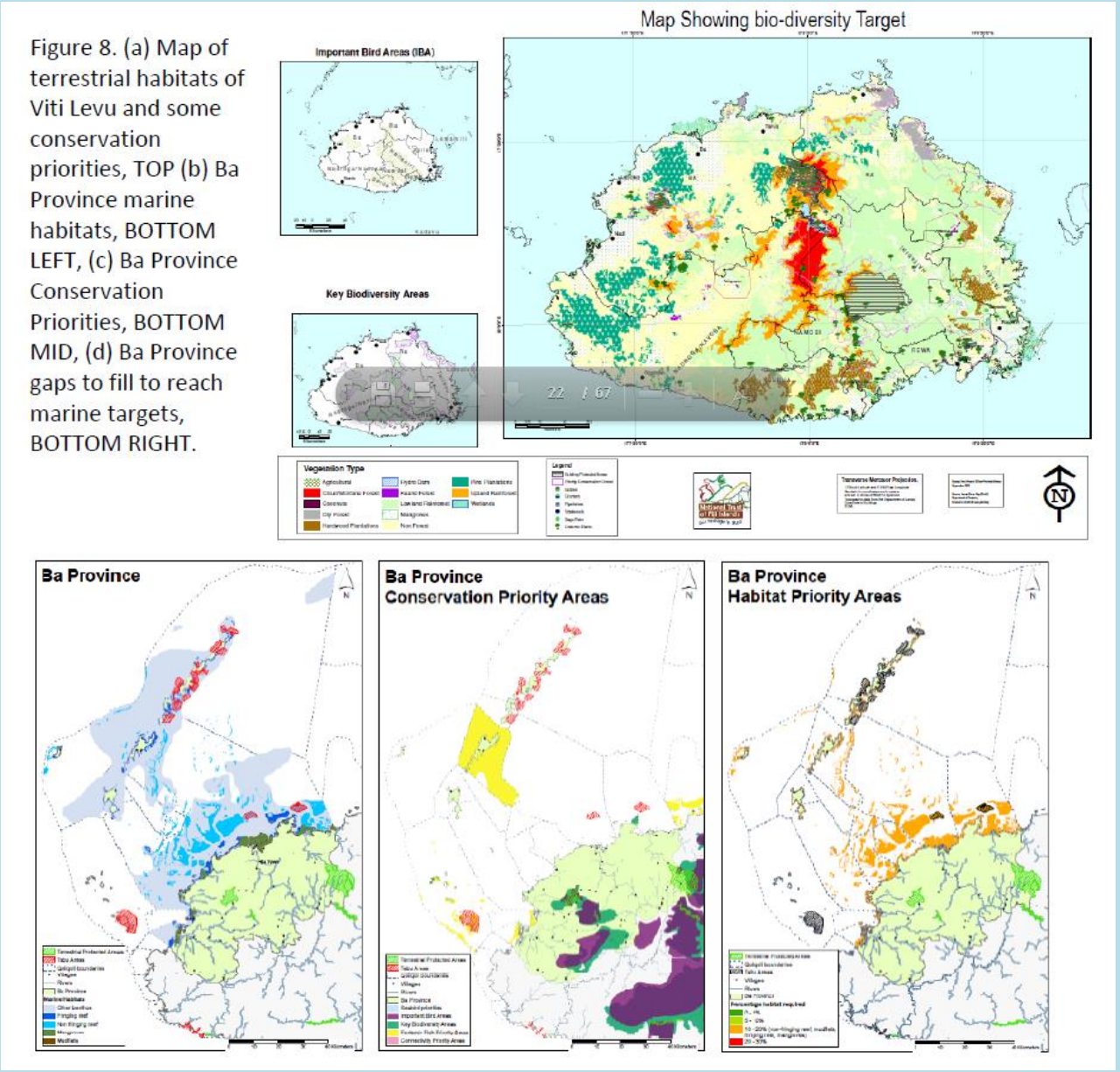


Figure 8. (a) Map of terrestrial habitats of Viti Levu and some conservation priorities, TOP (b) Ba Province marine habitats, BOTTOM LEFT, (c) Ba Province Conservation Priorities, BOTTOM MID, (d) Ba Province gaps to fill to reach marine targets, BOTTOM RIGHT.

Source: Filling the gaps: identifying candidate sites to expand Fiji ʻs national protected area network. *Outcomes report from provincial planning meeting, 20-21 September 2010.* **Wildlife Conservation Society.**

Ecological Gap Assessment Marshall Islands

Figure 3: Satellite photo of Jaluit Atoll overlaid with the map of conservation areas: Type II areas are shown in red and Type I areas are shown in green.

Source: Reimaan National Planning Team. 2008. *Reimaanlok: National Conservation Area Plan for the Marshall Islands 2007-2012. Published by: N. Baker: Melbourne.*

Ecological Gap Assessment Palau

Scenarios 3 and 4. Existing Protected Areas, Traditional Areas, Dive Areas & Proposed Protected Areas.

These two scenarios are quite similar. Scenario 3 "locks in" all existing protected areas and also traditional areas and dive sites and then allows MARXAN to search for *additional areas* to fully meet conservation goals. Scenario 4 is the same except that it also locks in proposed protected areas.

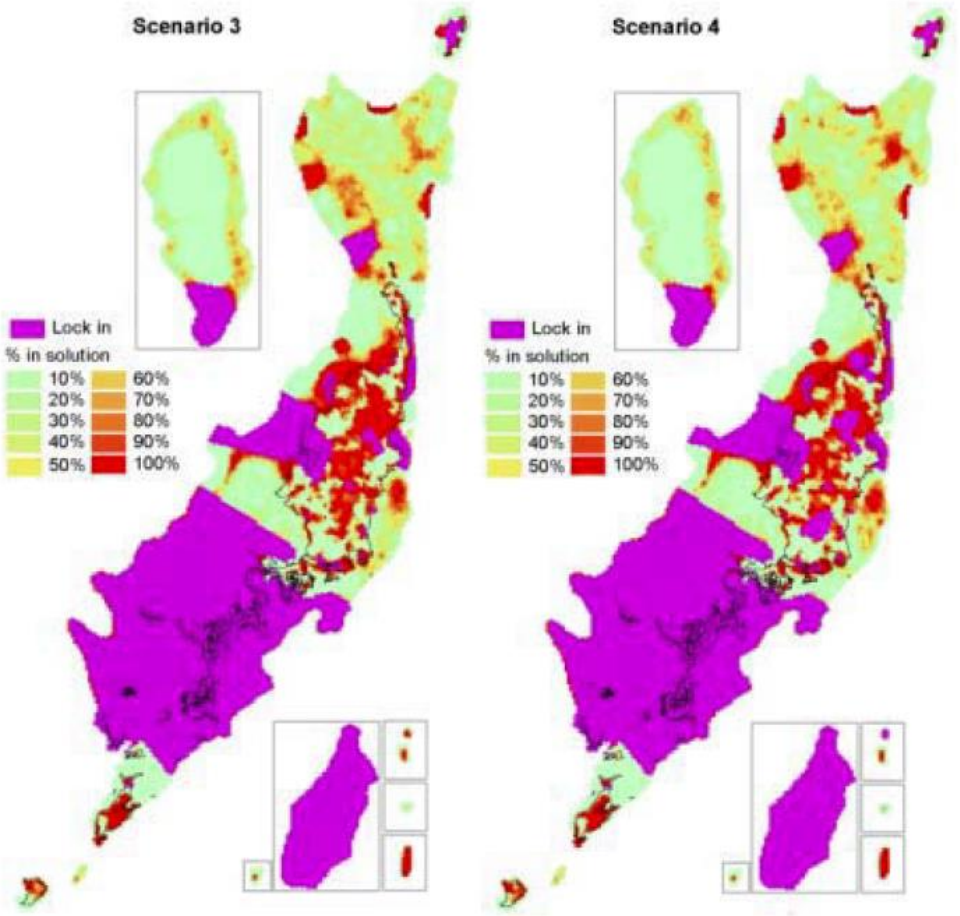


Figure 6. Scenario 3 -Existing Protected Areas, Traditional Areas, Dive Areas.

Figure 7. Scenario 4 -Existing Protected Areas, Traditional Areas, Dive Areas & Proposed Protected Areas.

Source: Hinchley, D., Lipsett-Moore, G., Sheppard, S., Sengebau, F.U., Verheij, E., and Austin S. (2007). **Biodiversity Planning for Palau's Protected Areas Network: An Ecoregional Assessment**. TNC Pacific Island Countries Report No. 1/07.

Ecological Gap Assessment Papua New Guinea

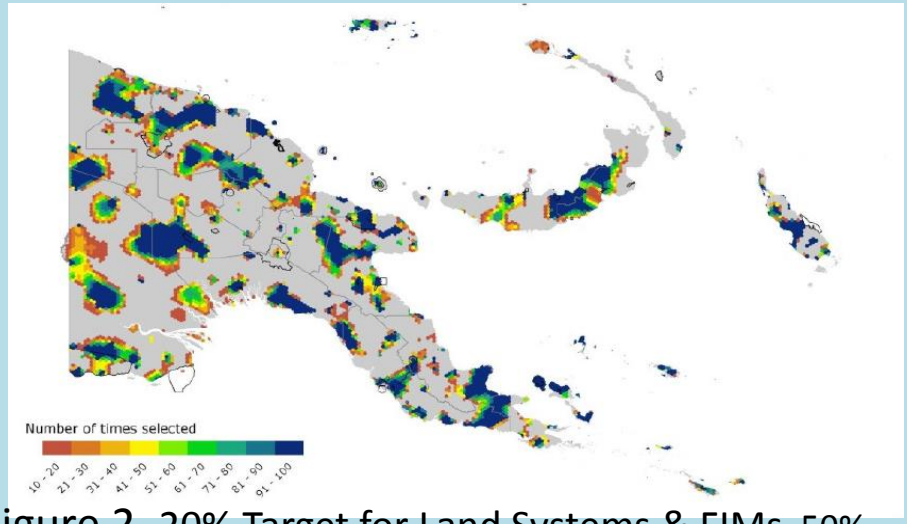


Figure 2. 20% Target for Land Systems & FIMs, 50% for Rare and Restricted Range Endemics, without protected areas, with climate change, BLM = 0.5. PAs in black outline.

Figure 1. 10% Target for Land Systems & FIMs, 50% for Rare and Restricted Range Endemics, without protected areas, with climate change, BLM = 0.5. PAs in black outline.

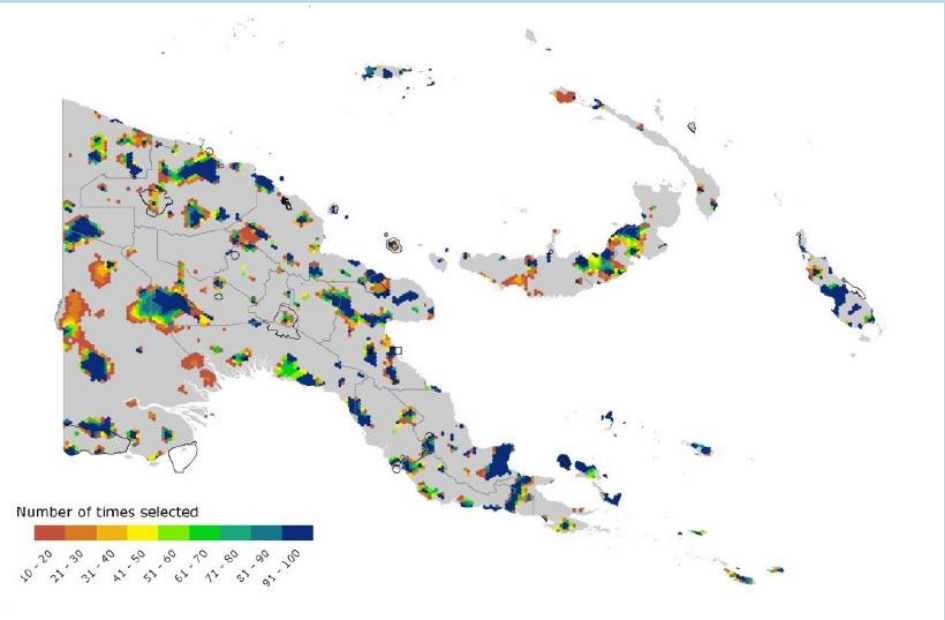
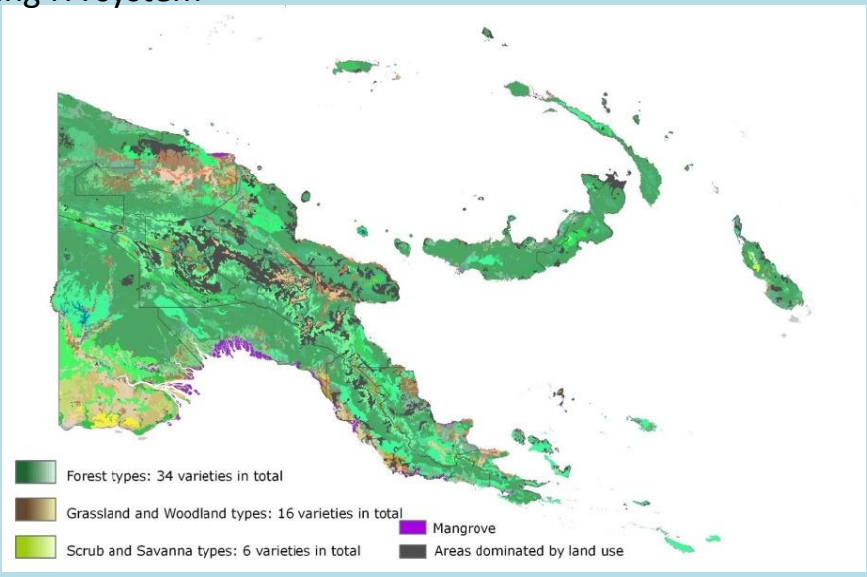
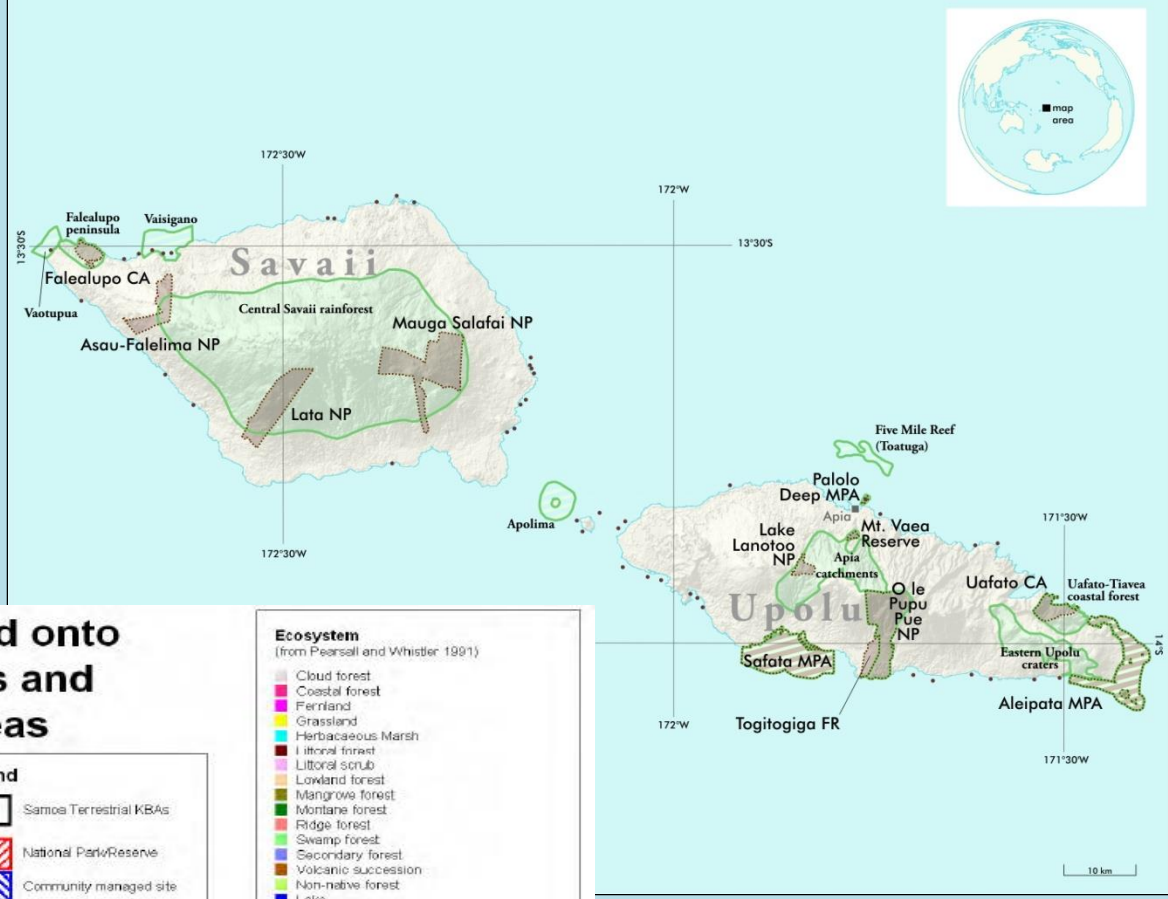
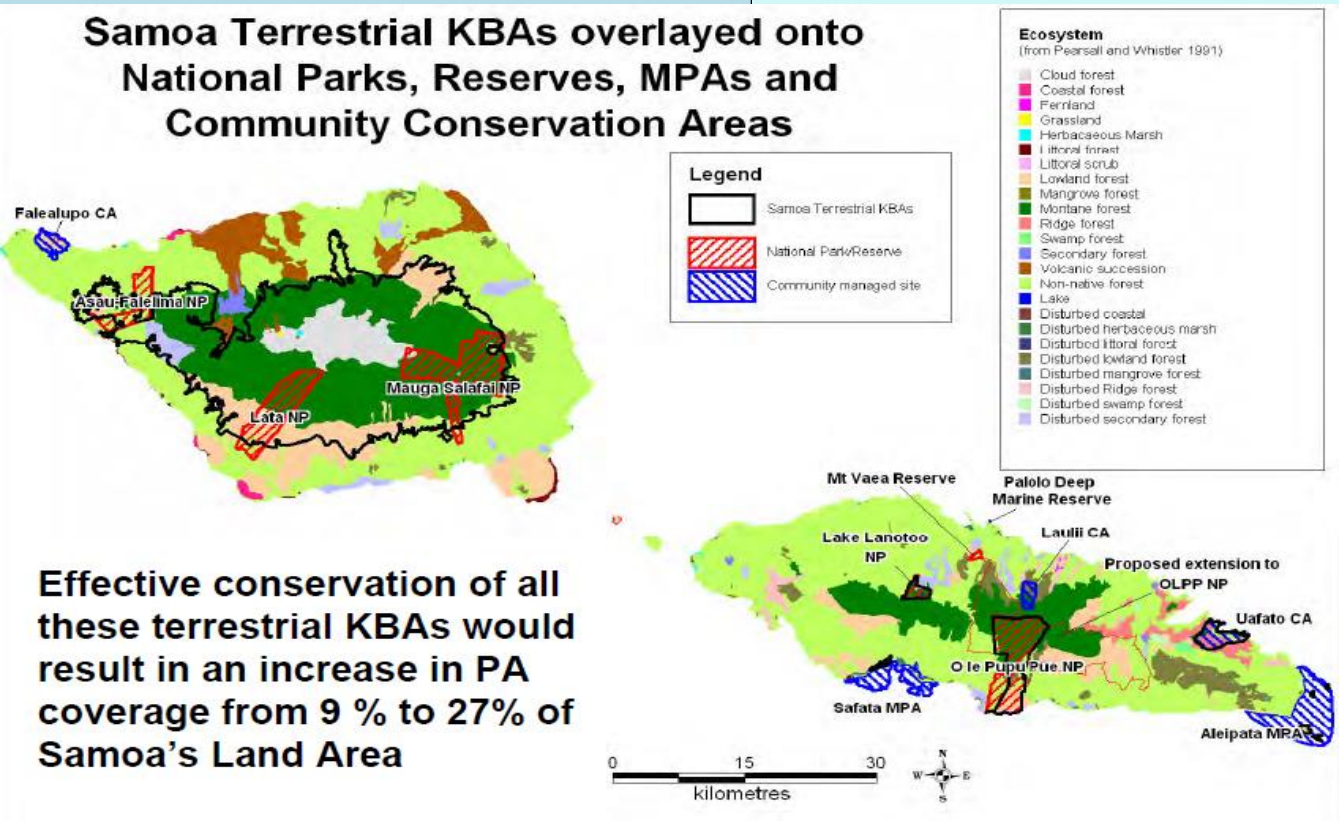


Figure 3. When evaluating the degree of representativeness of the existing PA system, 6 of the 57 Vegetation Types are effectively represented (> 10% protected) within the existing PA system



Ecological Gap Assessment Samoa

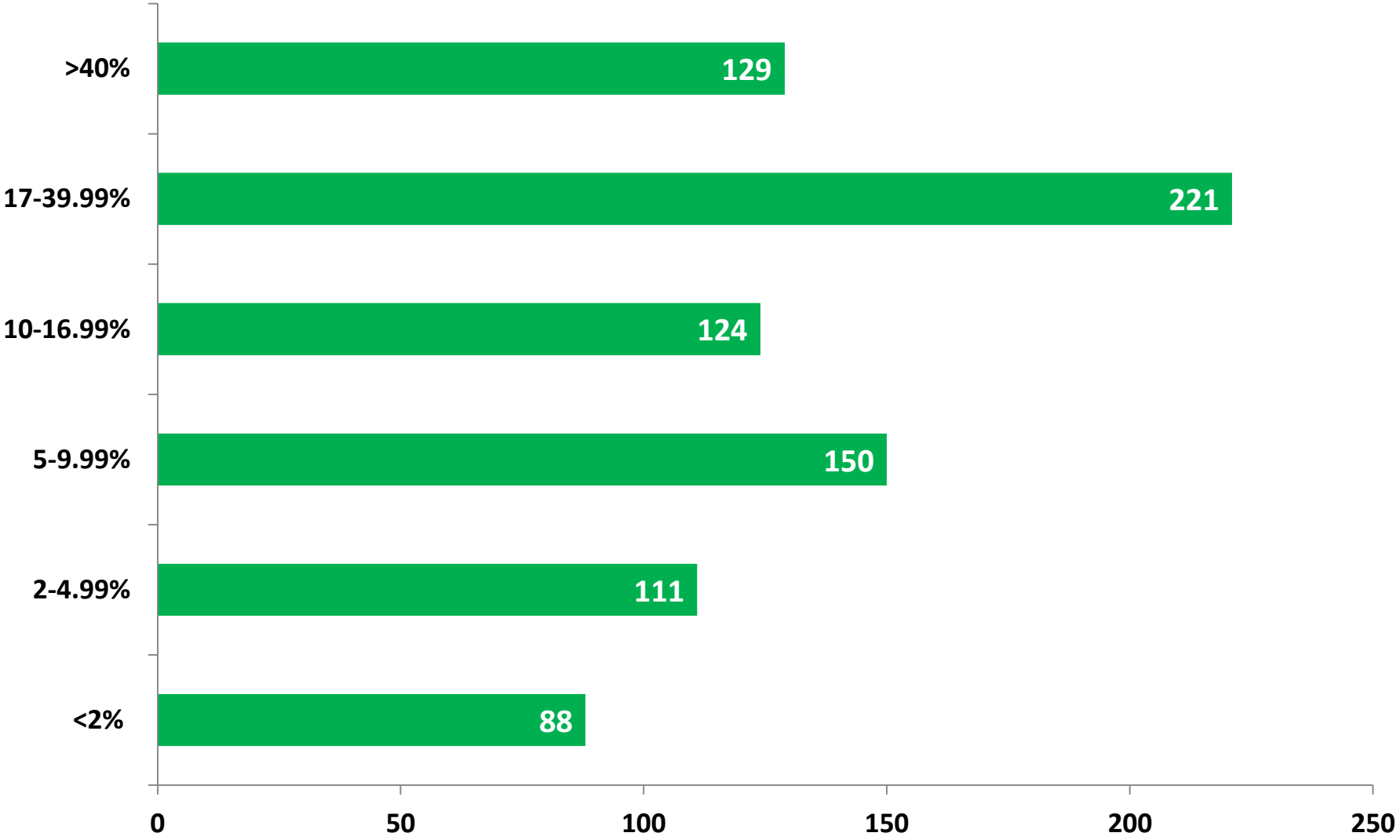




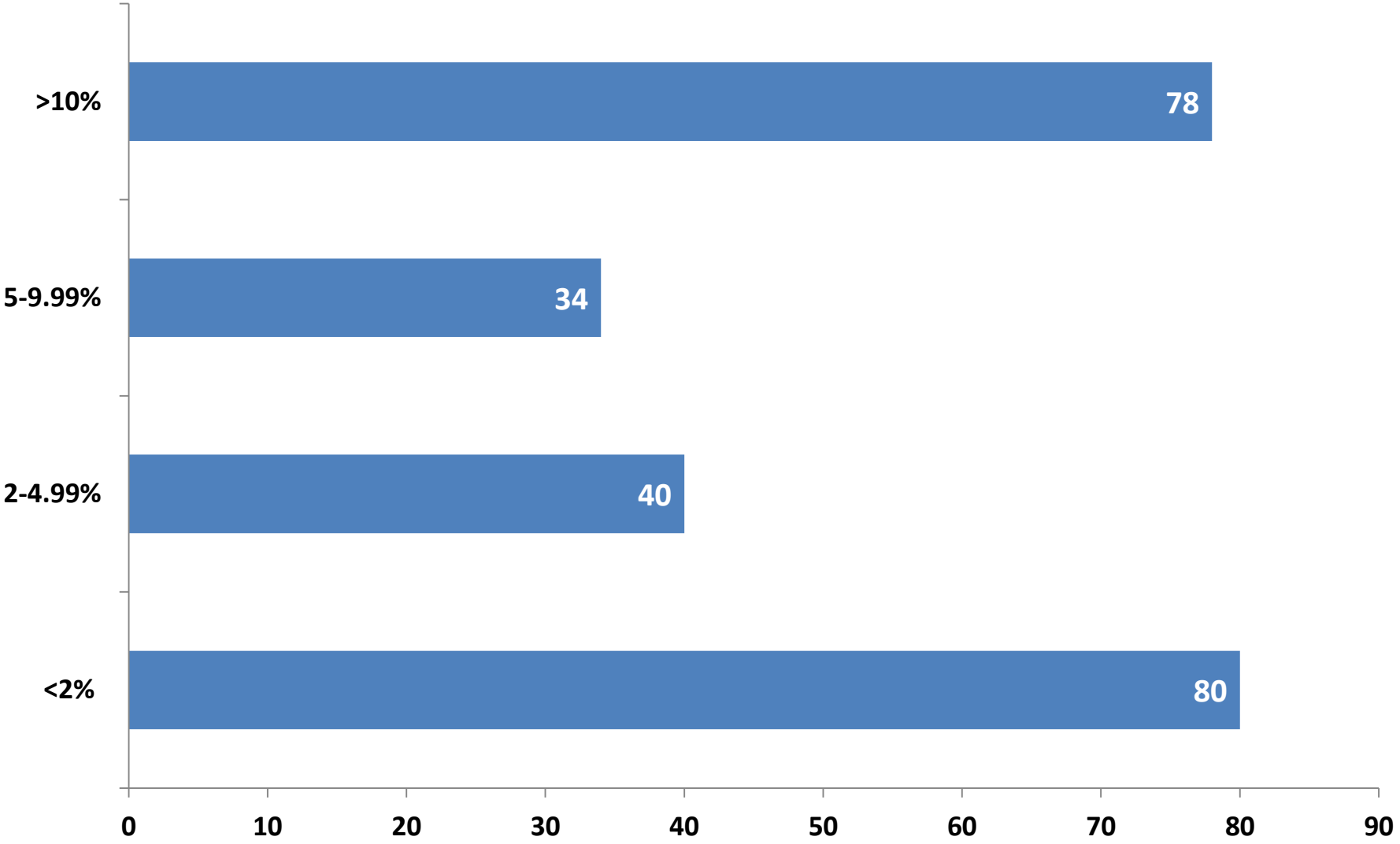
Effective conservation of all these terrestrial KBAs would result in an increase in PA coverage from 9 % to 27% of Samoa's Land Area

Source: Samoa National Action Plan for Implementing the CBD PoWPA. 2012.

Number of terrestrial ecoregions at different levels of protection (2014)

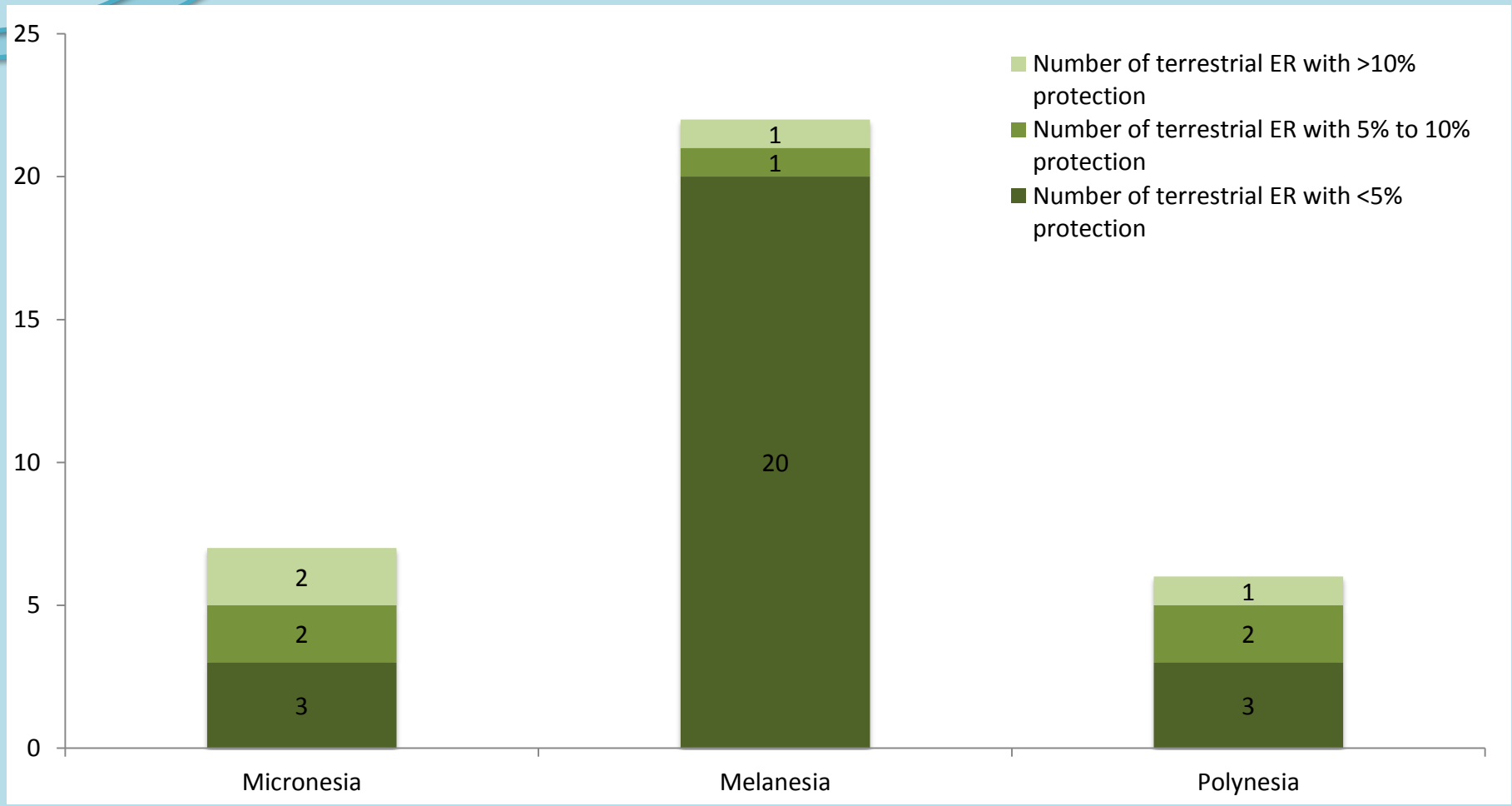


Number of marine ecoregions at different levels of protection (2014)



Ecological Representativeness in Micronesia, Melanesia and Polynesia

Number of terrestrial ecological regions (ER) and level of protection in the country



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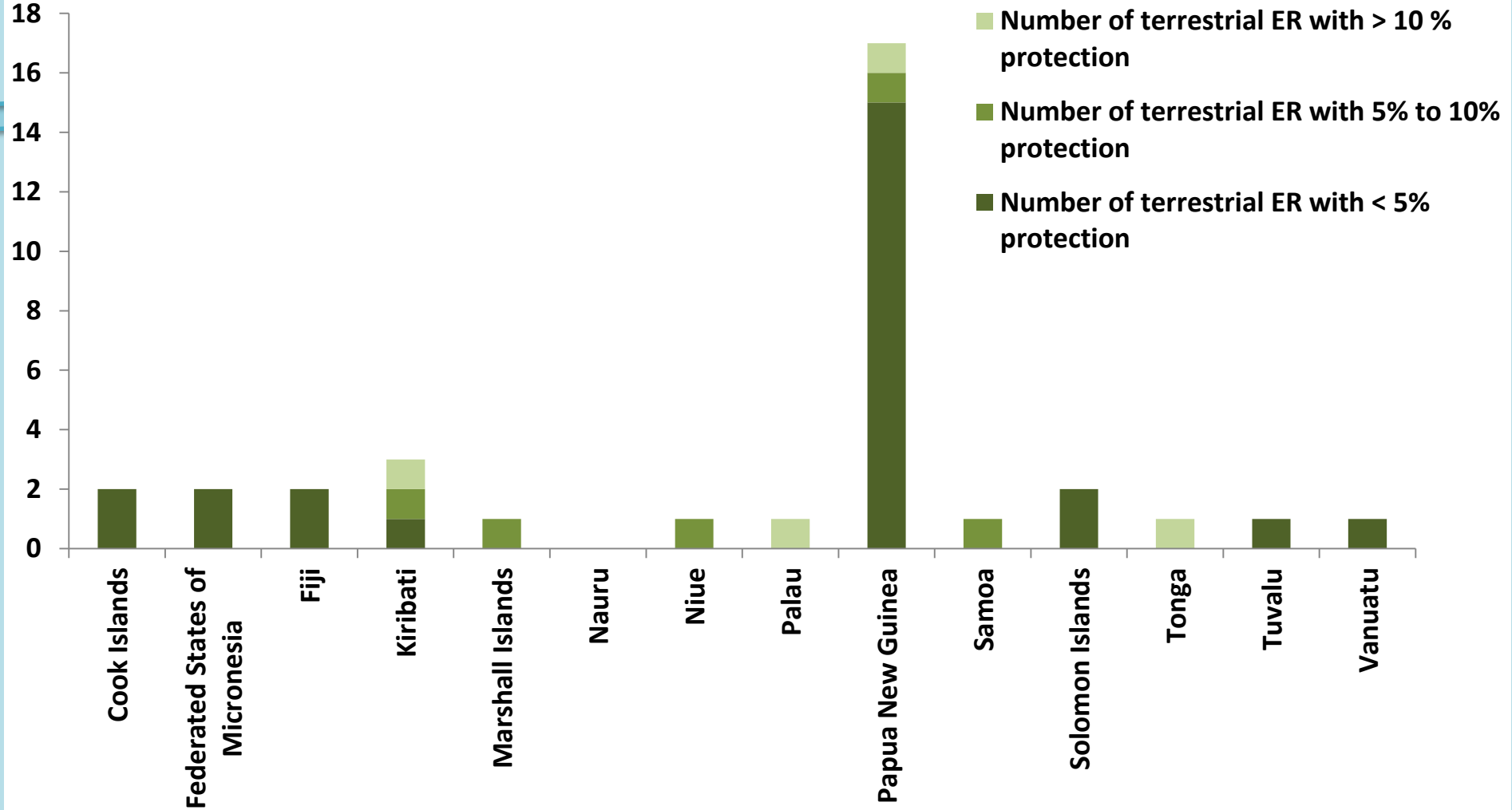
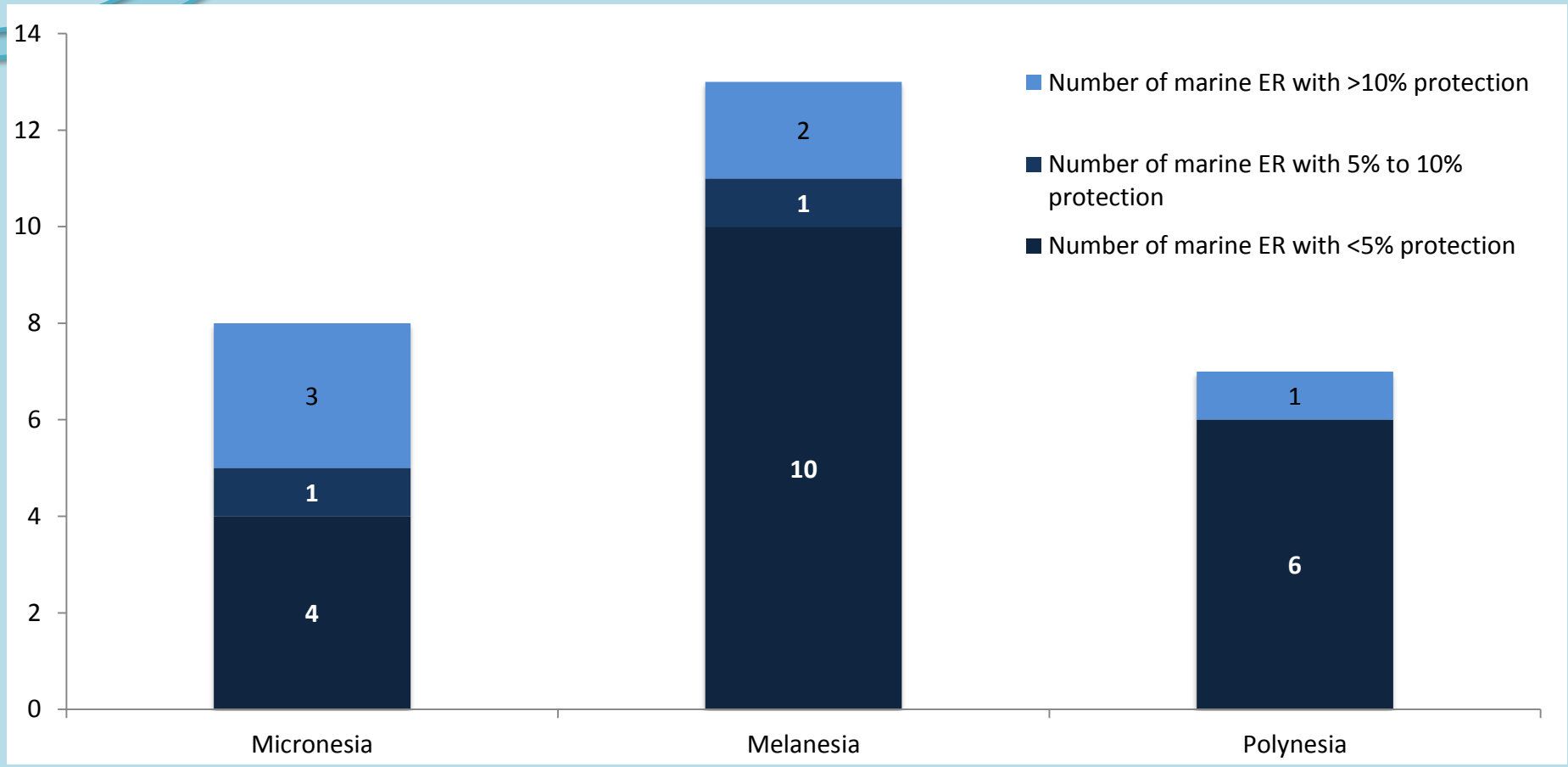


Ecological Representativeness in Micronesia, Melanesia and Polynesia

Number of marine ecological regions (ER) and level of protection in the regions



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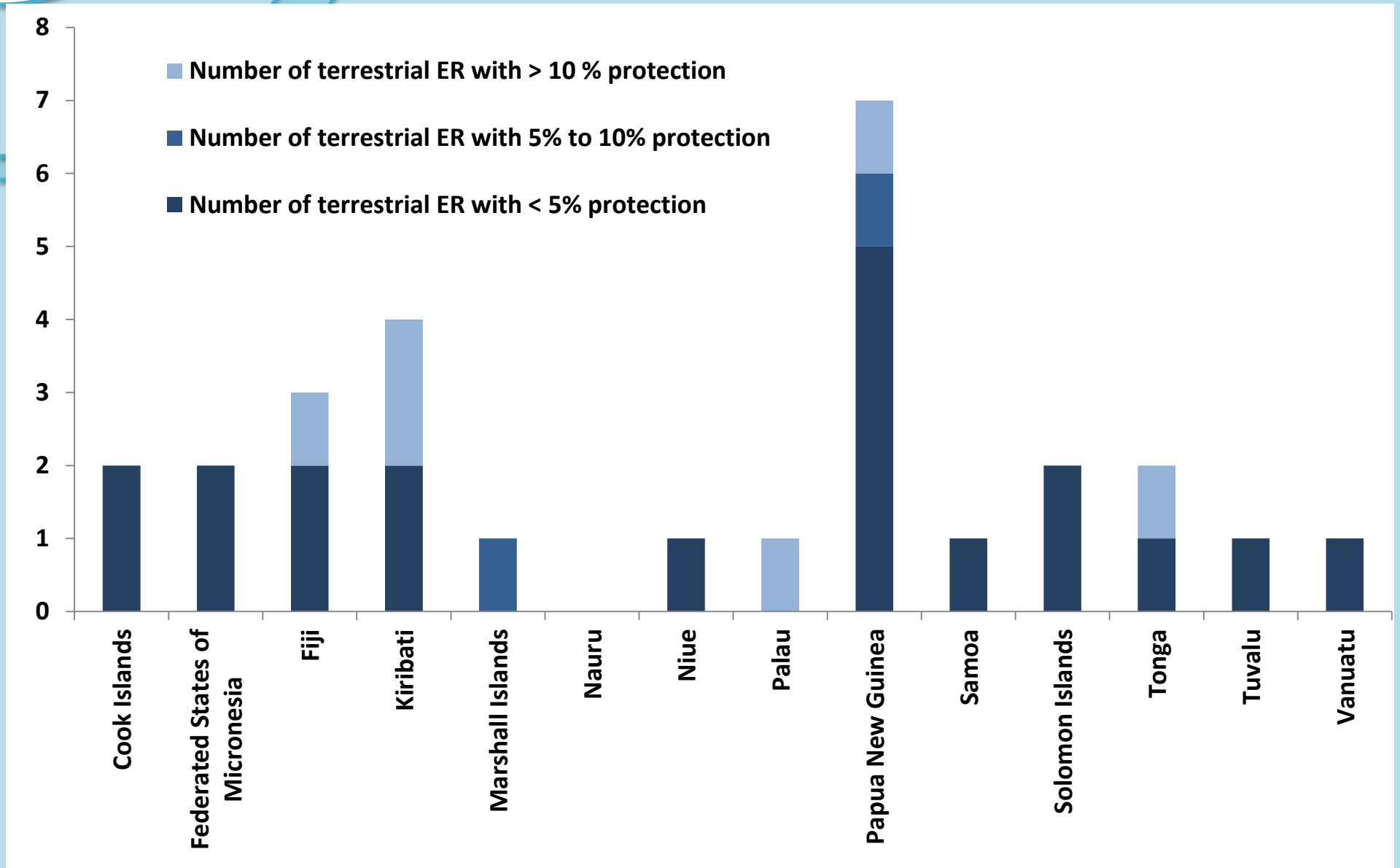


Overlaps between candidate ecoregions and Alliance for Zero Extinction sites– An example

Overlaps between unprotected and partially protected AZEs and candidates Ecoregions for further protection[6]

Out of 4 terrestrial overlaps:

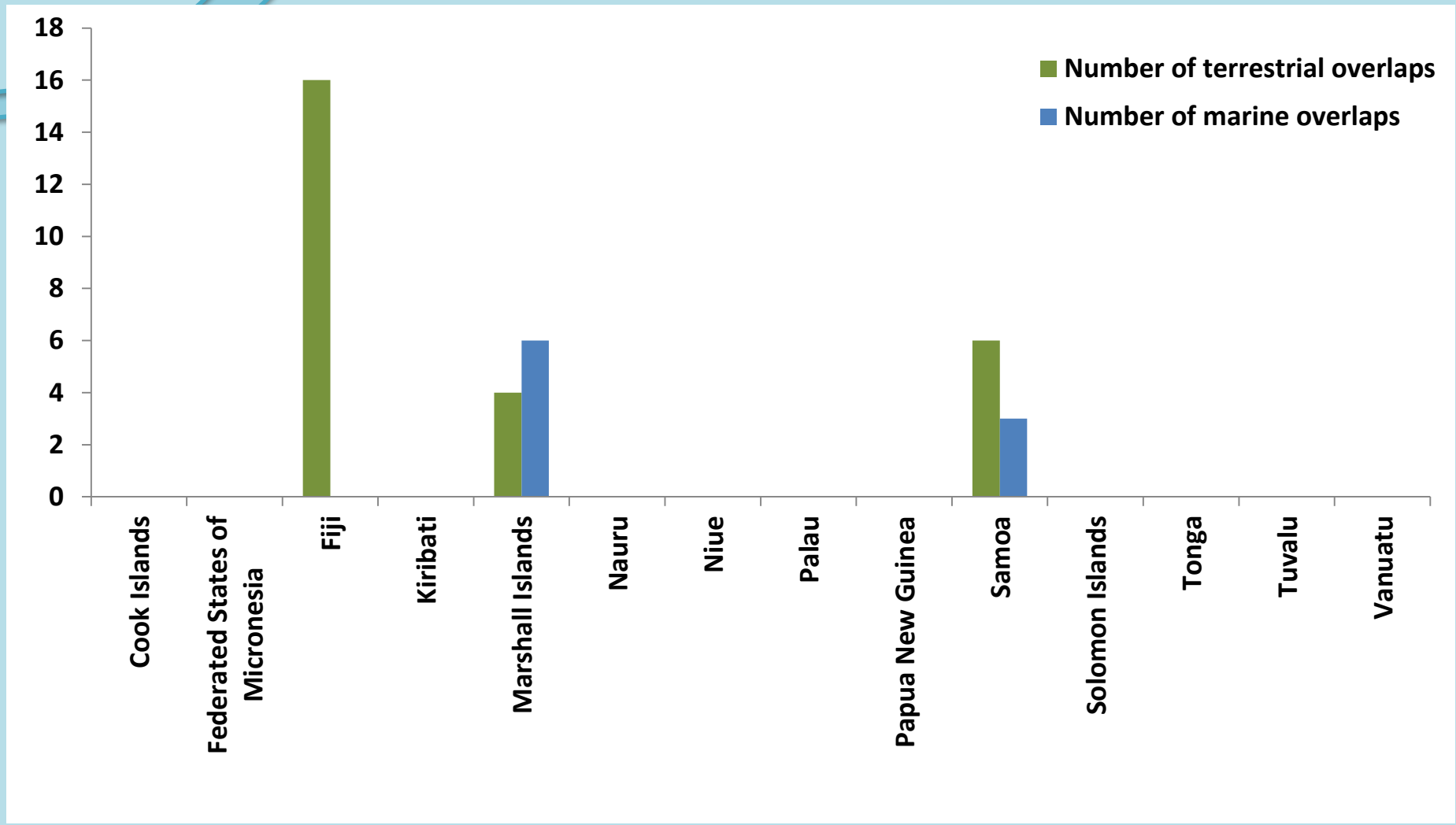
- If protection is extended to 3 AZEs which are not protected hitherto in Papua New Guinea, those actions also improve protection status of endemic or nearly endemic (80-100% in the country) terrestrial ecoregions that have a worldwide protection of less than 10%.
- If protection is extended to 1 AZE which is partially protected in Papua New Guinea, this action also improves protection status of an endemic or nearly endemic (80-100% in the country) terrestrial ecoregion that has a worldwide protection of less than 10%.

Out of 3 marine overlaps:

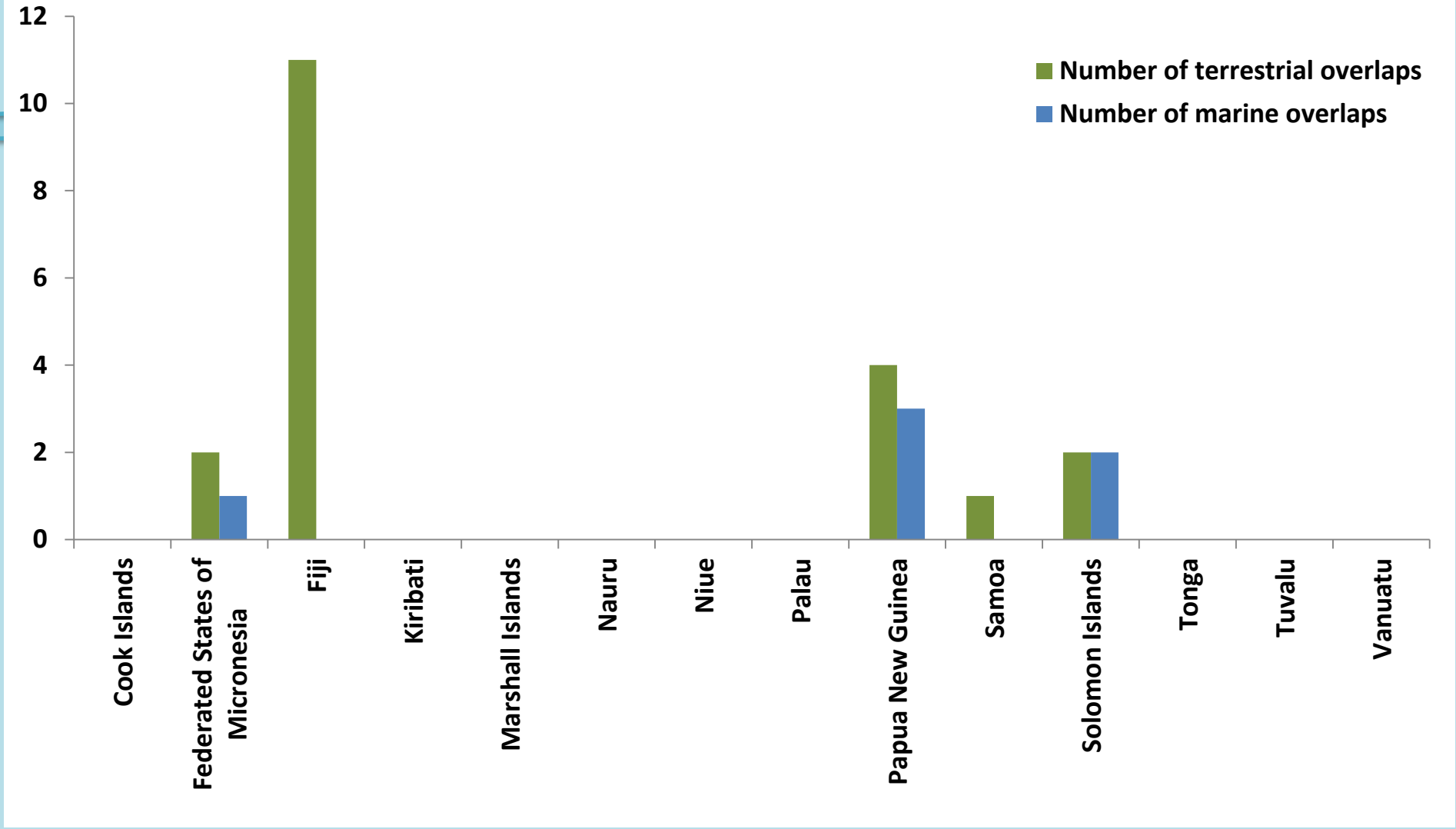
- If protection is extended to 3 AZEs which are not protected hitherto in Papua New Guinea, those actions also improve protection status of endemic or nearly endemic (80-100% in the country) marine ecoregions that have a worldwide protection of less than 10%.

Site Number	Site Name	Total area (ha)	Ecoregion Number	T/M	Ecoregion Name	% in country	Overlap (ha)	Overlap (%)
26369	Kemp Welch River	69,570.2	20137	M	Southeast Papua New Guinea	100.00	706.2	1.0
26369	Kemp Welch River	69,570.2	10120	T	Southeastern Papuan rain forests	100.00	66,682.9	95.8
26378	Maybole	19,221.8	20136	M	Solomon Sea	100.00	14.3	0.1
26378	Maybole	19,221.8	10125	T	Trobriand Islands rain forests	100.00	19,207.5	99.9

Overlaps between candidate ecoregions and Important Bird and Biodiversity Areas (IBAs) in Micronesia, Melanesia and Polynesia



Overlaps between candidate ecoregions and Alliance for Zero Extinction Sites (AZEs) in Micronesia, Melanesia and Polynesia



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Management Effectiveness

What is effectively managed ?

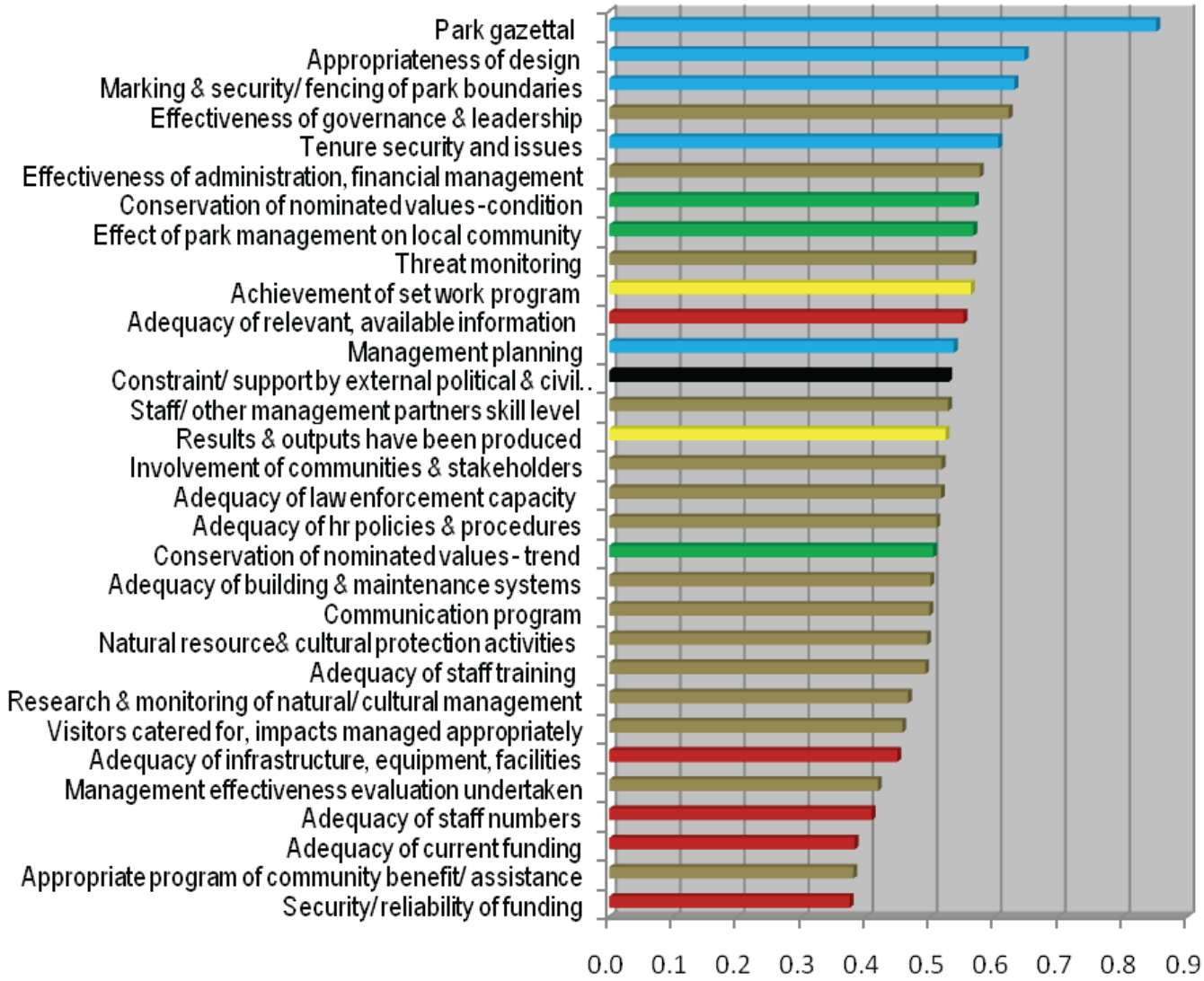
It is the degree to which protected area management protects biological and cultural resources, and achieves the goals and objectives for which the protected area was established.

Protected areas only work as conservation tools and provide ecosystem services if they are managed effectively to maintain their values in perpetuity.

Global Study on Management Effectiveness Evaluation in Protected areas

- The Global Study developed a 'common reporting format', defining headline indicators which represent the major themes and elements of the thousands of indicators used in the various assessment systems.
- Data was then 'translated' into the common reporting format, combined into one database and analyzed.
- The average score of 2,488 'most recent' assessments with available data was calculated at 0.53 on a zero to one scale
- It was considered that overall scores of less than 0.33 indicate clearly inadequate management, while average scores above 0.66 represent sound management.
- Only 14% were in the clearly inadequate range while *22% were in the sound management range*. Most protected areas were therefore clustered in the middle third (basic management), with 27% of the total in this range but below 0.5.
- Of the five management aspects assessed as strongest overall (scoring over 0.6) four are from the 'planning' element of the IUCN-WCPA Framework: gazettal and legal status, marking of protected area boundaries, tenure issues, and design of protected areas. The 'process' indicator relating to governance and leadership also scores highly.

Management Effectiveness Global Study – Headline Indicators



IUCN-WCPA Framework:

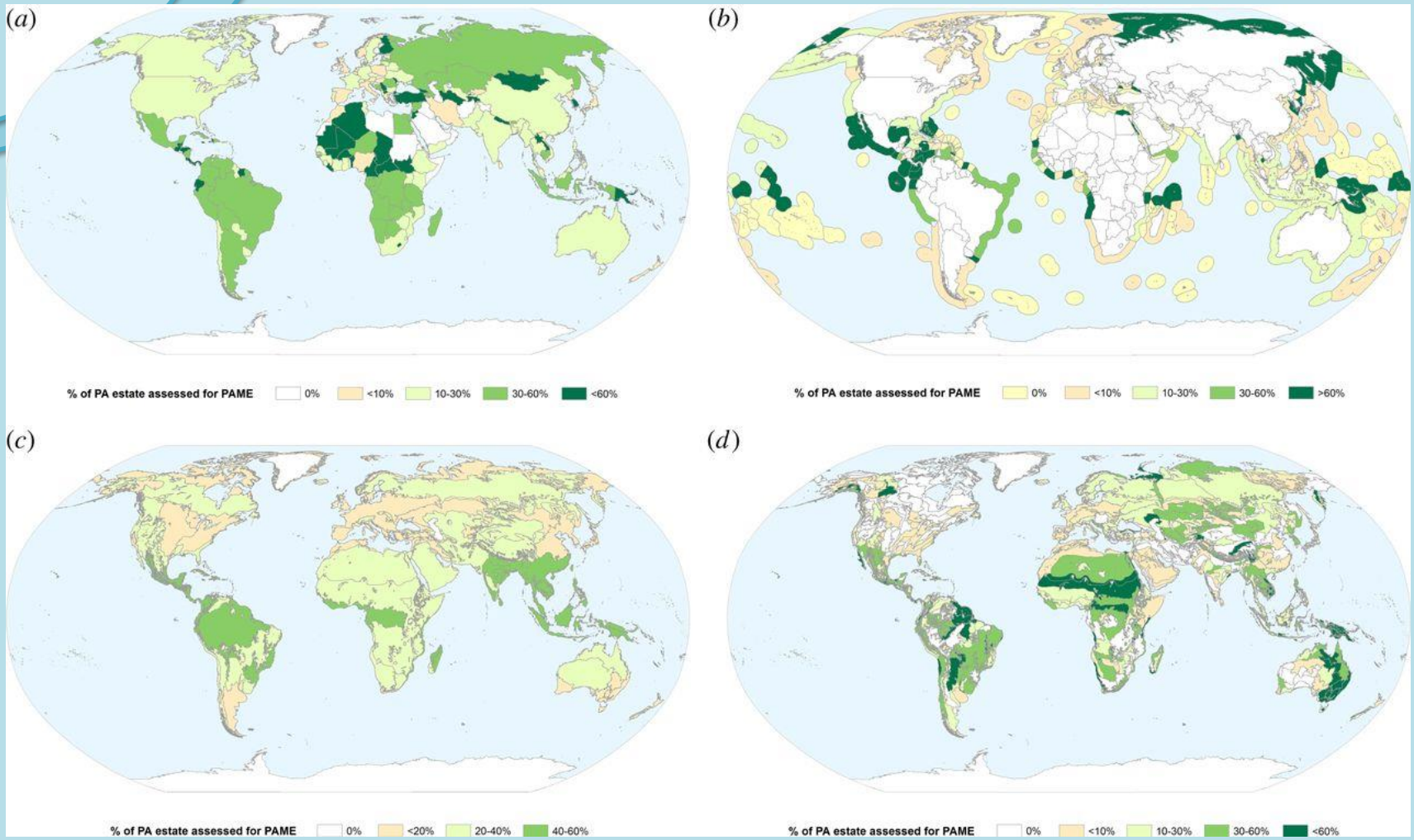
- Black indicates 'context' factors,
- Aqua 'planning' ,
- Red 'inputs',
- Brown 'process' ,
- Yellow ' outputs',

Green 'outcome'

Management Effectiveness– Dimensions of Management and Fields

- **Natural Integrity**
  - Biodiversity
  - Ecosystem function
  - Landscape and geology
  - Climate change resilience
- **Cultural and Spiritual**
  - Material culture
  - Cultural (other)
  - Spiritual
  - Aesthetic/ scenic
- **Socio-economic, Community Engagement and Recreation**
  - Recreation
  - Sustainable resource use
  - Economic
  - Science and educational use
  - Community
  - Human health and wellbeing

Progress towards the 60% PAME assessment target of the CBD Programme of Work on Protected Areas, by (a) terrestrial territory of countries, (b) marine territory of countries, (c) WWF biomes and (d) WWF terrestrial ecoregions.



Lauren Coad et al. Phil. Trans. R. Soc. B 2015;370:20140281

PHILOSOPHICAL TRANSACTIONS OF THE ROYAL SOCIETY B

Management Effectiveness

By 2020, areas are conserved through effective management…

- **Conservation needs equity: a fair sharing of the costs and benefits of preserving biodiversity and managing natural resources in a sustainable way**
- **Conservation needs respect to human rights: " do not harm"…and have a positive impact on livelihoods wherever possible**
- **So…what can we do to avoid further loss of habitats, species and natural resources?**
- **How can we ensure the very base of life, of livelihoods, and development ?**

By 2020, is it possible to have management effectiveness evaluations conducted for 100% of protected areas and ensure that 40% are under sound management?

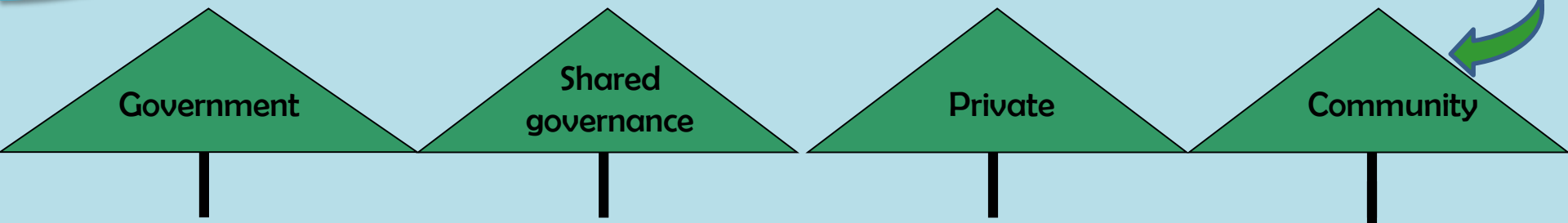
Equitable Management: IUCN matrix of protected areas categories and governance types

Governance type / Category (mngmt. objective)	A. Governance by Government			B. Shared Governance			C. Private Governance			D. Indigenous Peoples & Community Governance	
	Federal or national ministry or agency	Local/ municipal ministry or agency in change	Government-delegated management (e.g. to an NGO)	Trans-boundary management	Collaborative management (various forms of pluralist influence)	Joint management (pluralist management board)	Declared and run by individual land-owner	…by non-profit organisations (e.g. NGOs, univ. etc.)	…by for profit organisations (e.g. corporate land-owners)	Indigenous bio-cultural areas & Territories-declared and run by Indigenous Peoples	Community Conserved Areas - declared and run by traditional peoples and local communities
I - Strict Nature Reserve/ Wilderness Area											
II – National Park (ecosystem protection; protection of cultural values)											
III – Natural Monument											
IV – Habitat/ Species Management											
V – Protected Landscape/ Seascape											
VI – Managed Resource											

Equitable Management

By 2020, areas are conserved through equitably managed…

i.e. Indigenous and Community Conserved Areas, ICCA



ICCA

Community Management

IUCN WCPA

CEESP

TILCEPA

Explanation of the Elements of Aichi Biodiversity Target 11

By 2020,

at least 17 % of terrestrial and inland water areas, and 10 % of coastal and marine areas,

... especially areas of *particular importance for biodiversity and ecosystem services,*

... are conserved through ... protected areas that are...

... effectively and equitably managed,

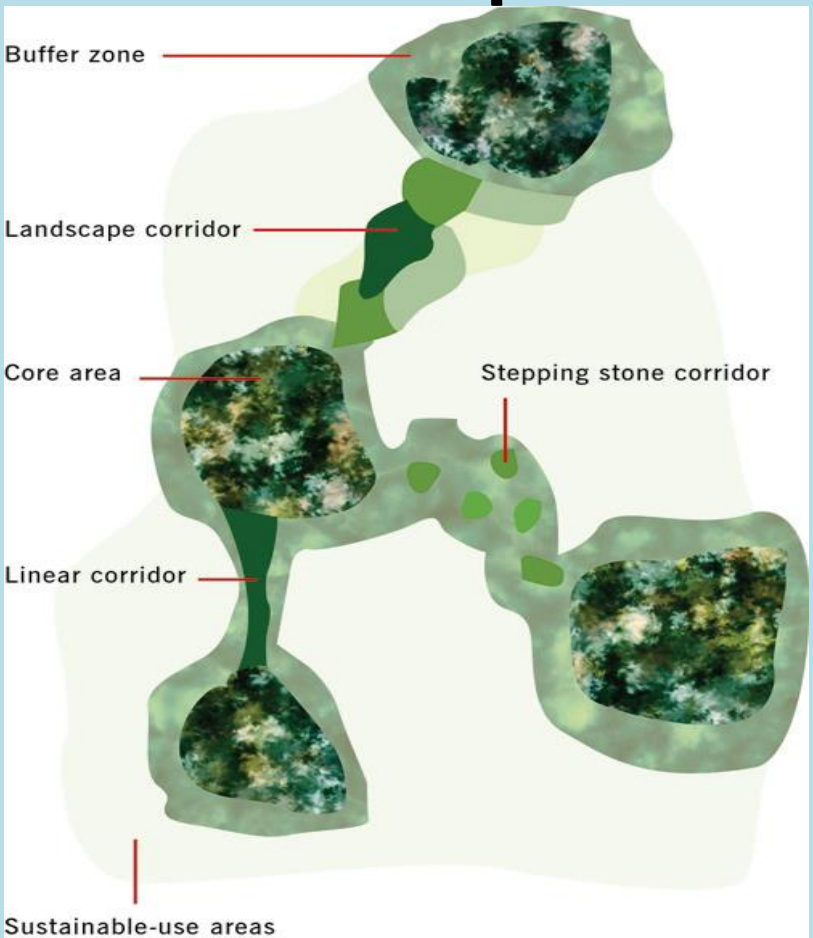
... ecologically representative,

... well connected systems, integrated into the wider landscapes and seascapes,

... and other effective area-based conservation measures

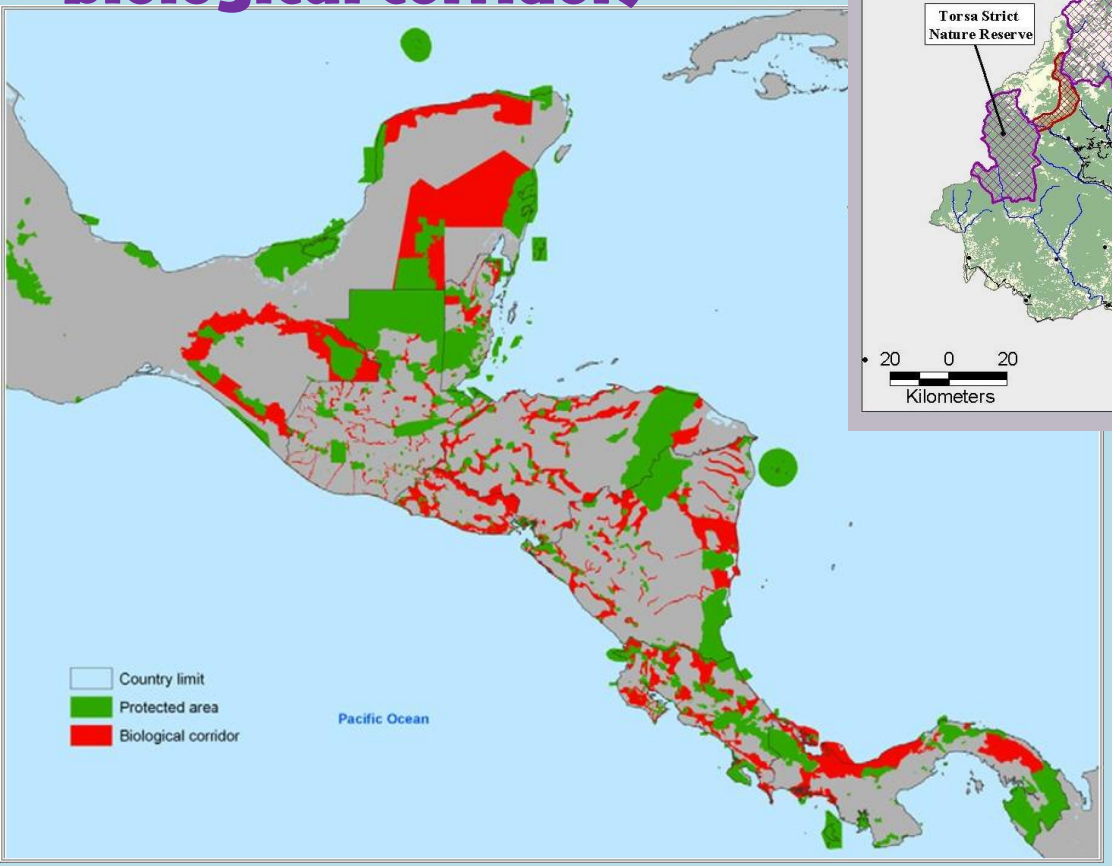
Integration and Connectivity

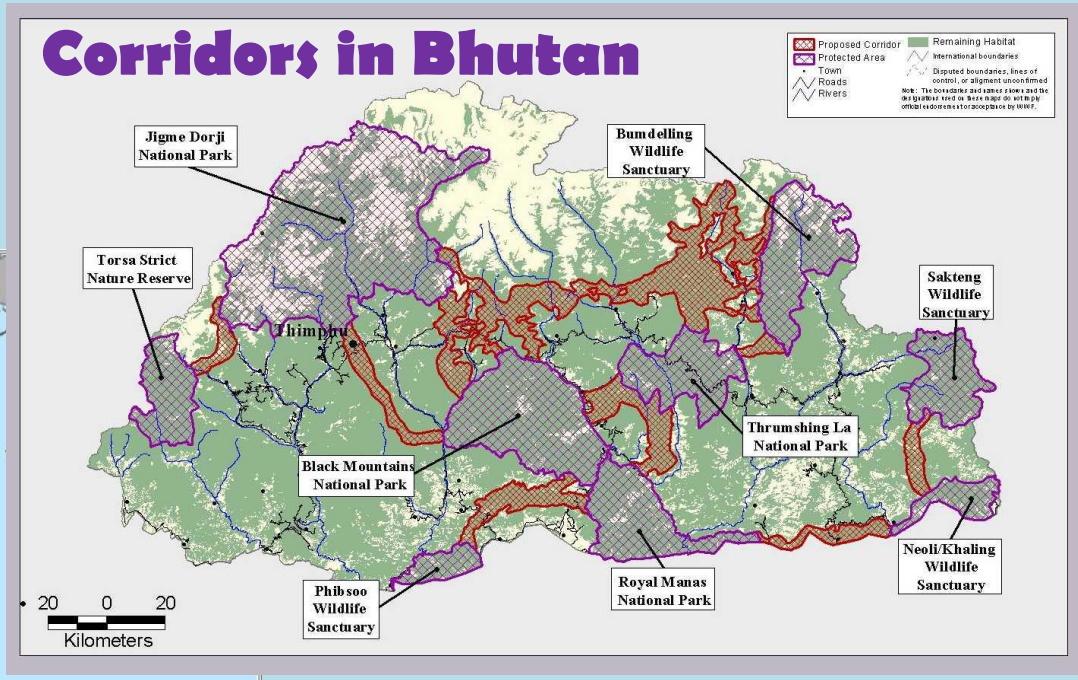
By 2020, areas are conserved through well connected systems, integrated into the wider landscapes and seascapes



Integration and Connectivity

Mesoamerican biological corridors





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Other effective area-based conservation measures

What are other effective area-based conservation measures?

- ***ICCAs including LMMAs***
- ***Private PAs***

TASK FORCE ON OTHER EFFECTIVE AREA-BASED CONSERVATION MEASURES

Some core traits may include:

1) They should be well-defined geographically;
2) They should have objectives for biodiversity conservation, achieved through conservation of biodiversity as a whole;
3) Their conservation objectives must receive first priority when in conflict with other objectives;
4) The mechanisms by which the areas are established must have the comprehensive ability to exclude, control, and manage all activities likely to have impacts on biodiversity, and must compel the prohibition of incompatible activities;
5) They should be in place for the long term;
6) The mechanisms by which they are established must be difficult to reverse; and
7) They should be in effect year-round.

Progress towards implementing elements of Aichi Biodiversity Target 11 for Pacific Islands

Element of Target 11	Status of activity	Countries
Expand protected area coverage of coastal and marine areas	Significant or more progress	Kiribati, Palau, Tonga
	Activity underway	Fiji
	Limited or no progress	Cook Islands, Marshall Islands, Micronesia, Niue, PNG, Samoa, Solomon Islands, Tuvalu, and Vanuatu
Expand protected area coverage of terrestrial and inland water	Significant or more progress	Kiribati, Niue, Palau, Tonga
	Activity underway	Samoa
	Limited or no progress	C.I., Fiji, M.I., Micronesia, PNG, S.I., Tuvalu, Vanuatu
Improve management effectiveness	Activity underway	Fiji, Micronesia, Palau, Samoa, Solomon Islands, Tonga
	Limited or no progress	Cook Islands, Kiribati, Nauru, Niue
Improve equitable management (with diverse governance types)	Significant or more progress	Cook Islands, Fiji, Micronesia, Palau, Samoa, Tonga
	Activity underway	Kiribati, Niue
	Limited or no progress	Nauru, Solomon Islands

Progress towards implementing elements of Aichi Biodiversity Target 11 for Pacific Islands

Element of Target 11	Status of activity	Countries
Improve ecological representation	Significant or more progress	C.I., Fiji, Kiribati, Micronesia, Palau, Tonga
	Activity underway	Samoa, Tuvalu
	Limited or no progress	Nauru, Niue, Solomon Islands
Improve other effective area-based conservation measures	Significant or more progress	Tonga, Tuvalu
	Activity underway	Fiji, Micronesia, Palau, Solomon Islands
	Limited or no progress	Cook Islands, Kiribati, Nauru, Niue, Samoa
Improve protected area integration and connectivity into landscapes, seascapes, and sectors	Significant or more progress	Fiji, Solomon Islands, Tonga
	Activity underway	Kiribati, Micronesia, Samoa, Tuvalu
	Limited or no progress	Cook Islands, Nauru, Niue, Palau
Improve sustainable finance for protected areas	Significant or more progress	Palau
	Activity underway	Kiribati, Micronesia, Tuvalu
	Limited or no progress	Cook Islands, Fiji, Nauru, Niue, Samoa, Solomon Islands, Tonga

Group Work

Element of Aichi Target 11 and 12	Status	Gaps	Opportunities
Quantitative aspects	i.e. % of total protected areas for terrestrial and marine	i.e. % to reach national target	i.e. % gap between current status + implementation and national target
Improving ecological representation	i.e. % of ecoregions protected to national target	i.e. % of ecoregions needing protection to reach national target i.e. tools and partnerships needed to develop ecological gaps assessment	i.e. 20% of 5 endemic ecoregions will be protected i.e. partnership with X for national training on ecological mapping
….			

Summarize quantitative information collected from the questionnaire in one or two points.

What is needed to complete conservation gap?
Points made can be:
- tangible/ quantitative
- in-tangible/ qualitative

What specific elements are feasible?
Points made can be:
- tangible/ quantitative
- in-tangible/ qualitative

Sub-regional Groups

Micronesia

- Federated States of Micronesia
- Kiribati
- Marshall Islands
- Nauru
- Palau

Melanesia

- Fiji
- Papua New Guinea
- Solomon Islands
- Vanuatu

Polynesia

- Cook Islands
- Niue
- Samoa
- Tonga
- Tuvalu