



# RAPPAM

## Papua New Guinea



# Outline

**Why RAPPAM in PNG?**

**Goals and Approach**

**Adapting RAPPAM to PNG**

**PAs in PNG**



# Why RAPPAM in PNG?



# Why RAPPAM?

There are major problems with the PNG protected area system

- Existing types of PAs are not working
- Logging and mining concessions are being declared over the top of protected areas
- There is no clear agreement on how to establish or manage PAs
- New PAs gazettals are taking far too long
- There is little public awareness of the value of PAs
- No resources are allocated to PAs



# Government policy

The DEC strategic plan sets out four goals in relation to protected areas ...

1. rehabilitation of existing areas
2. development of an expanded system of conservation areas
3. the strengthening of planning, management and evaluation capabilities of groups involved in conservation and management; and
4. communication / advocacy which fosters support for the conservation area system.



Last year PNG committed to the CBD target that...

***by 2010 terrestrially and 2012 in the marine area a global network of comprehensive, representative and effectively managed national and regional protected area systems is established***



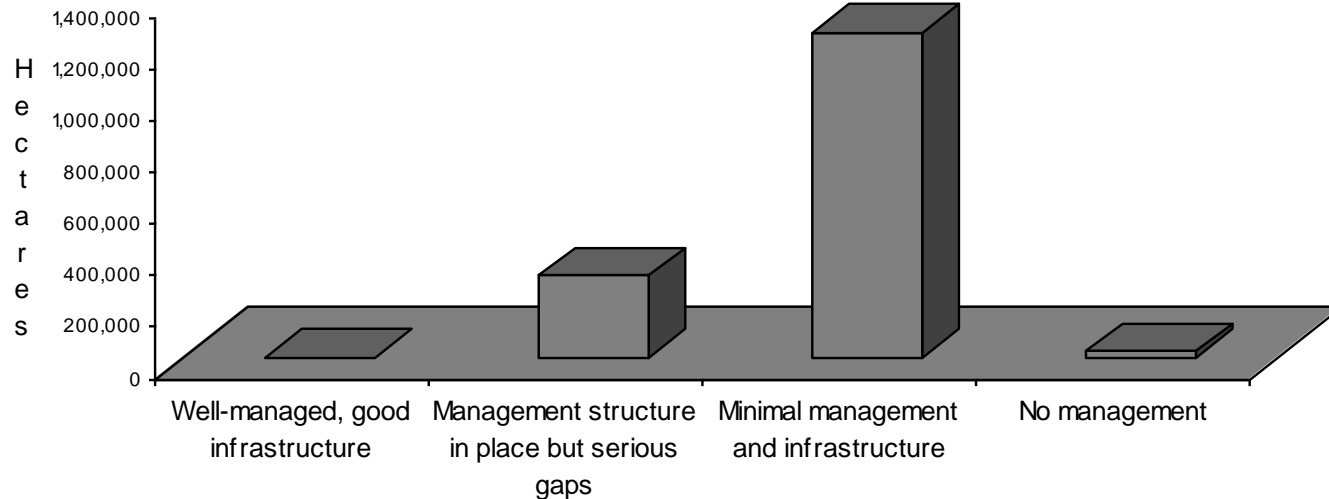
# Previous Work

- 1992 – WWF DEC Conservation Area Strengthening Project
- 1993 – Register of PNG Protected Areas
- 1999 – IUCN review of management effectiveness of forest protected areas



An IUCN/WWF review in 1999 showed that **89%** of PNG's protected areas have minimal or no management structure ...

Summary of Management Status in Hectares: Papua New Guinea





# RAPPAM Goals

*to improve the management effectiveness of PNG protected areas and the protected area system*



# Objectives

## Individual PAs

1. understand whether individual PAs are **achieving their conservation goals** and are supported by landholding communities
2. identify **threats and pressures** to individual PAs and across the system
3. consider how effectively PAs contribute to the **livelihoods** and aspirations of communities
4. make **recommendations for improving on-ground management** in PAs

## PA System

1. review the strengths and weaknesses of **government and NGO support** to PAs
2. understand **which approaches and tools are effective** in helping communities to manage their natural resources
3. explore **mechanisms to reduce conflict** between PAs and other land uses
4. examine how best to **apply the resources and skills** of government and non-government agencies to strengthen the PA system
5. recommend steps to **improve PA policy and practice**



# Results

1. Conclusions on **strengths and weaknesses of PA management** in PNG
2. Analysis of main **pressures and threats** on the PNG PA system
3. **Recommendations for further improvements** in future (PA management policy, objectives, practices and resource allocation)
4. Updated **database and PA Register** of the status and management of selected PAs in PNG



# Scope

- All 51 existing protected areas
- Some proposed protected areas were reviewed
- Terrestrial and marine
- Rural and urban



# Adapting RAPPAM to PNG



# Adaptation for PNG

## **PNG presents some unique challenges in applying RAPPAM**

- Customary tenure
- Very poor information on many PAs
- Low literacy rate
- Few people have a full picture of any one PA
- Landholders want economic, cultural or spiritual benefits from PAs



# Sepik and Madang trials



# Review by working group





# RAPPAM Working Group

- **WWF** - Liza Higgins-Zogib, Ruby Yamuna, Nick Mitchell, Paul Chatterton
- **DEC** – Vagi Genorupa, James Sabi, Godu Valai, Arthur Gunabella, Onkie Kimve
- **PNG Forest Authority** – Alimel Bellet
- **Research and Conservation Foundation** – Kepslock Kumilgo
- **The Village Development Trust** – John Sengo (now CM)
- **The Nature Conservancy** – Warren Jano
- **Mr John Duguman** – (PhD student)



# Adaptation for PNG

To address these differences, we ...

- 1. Collected primary data**
- 2. Added questions relevant for PNG**
  - Livelihoods
  - Traditional management systems
  - Community entry
  - Community management
- 3. Conducted simplified questionnaires in the village**
- 4. Worked with groups of villagers and local officials**
- 5. Used visual (PRA) methods**
- 6. Approached it as a learning experience for protected area communities**



	IN THE LAST 5 YRS		SHORT-TERM	
BAGARAPANE istap nau yet				
- DYNAMITE	→ MODERATE	LOCALIZED	DECREASE SLIGHTLY	LONG TERM (20-100 yrs)
- POISON ROPE	→ MILD	SCATTERED	REMAIN CONSTANT	SHORT TERM (< 5 yrs)
- POLLUTION	→ MODERATE	WIDESPREAD	CONSTANT	20-100 yrs
- SEDIMENTATION (gardening on main land) - mud use, →	→ MODERATE	LOCALIZED	INCREASED SLIGHTLY	MEDIUM TERM (5-20 yrs)
- INTRODUCED SPECIES	→ MILD (Sebanu) (to find out → Simbu)	SCATTERED	CONSTANT but INCREASED SLIGHTLY	UNCERTAIN → MEDIUM TERM.
- FREQUENT HIGH TIDES (climate change)	→ MODERATE	WIDESPREAD	INCREASED SLIGHTLY	UNCERTAIN (PERMANENT, > 100 yrs)
- KATIM DIWAH lay wima	→ HIGH	LOCALIZED	INCREASED SHARPLY	5-20 yrs
<b>THREATS</b>				
- COMMERCIAL FISHING IN WIMA	→ MODERATE (Sebanu)			
- MIGRATION OF PEOPLE	→ MODERATE			
- SPEAR FISHING AT NIGHT	→ HIGH			



# Adaptation for PNG



# RAPPAM visits





Crater Mountain WMA, Eastern Highlands Prov



Ranba WMA, Madang Prov

# PAs in PNG





# There are at least **19** types of PAs ... many with overlapping purposes

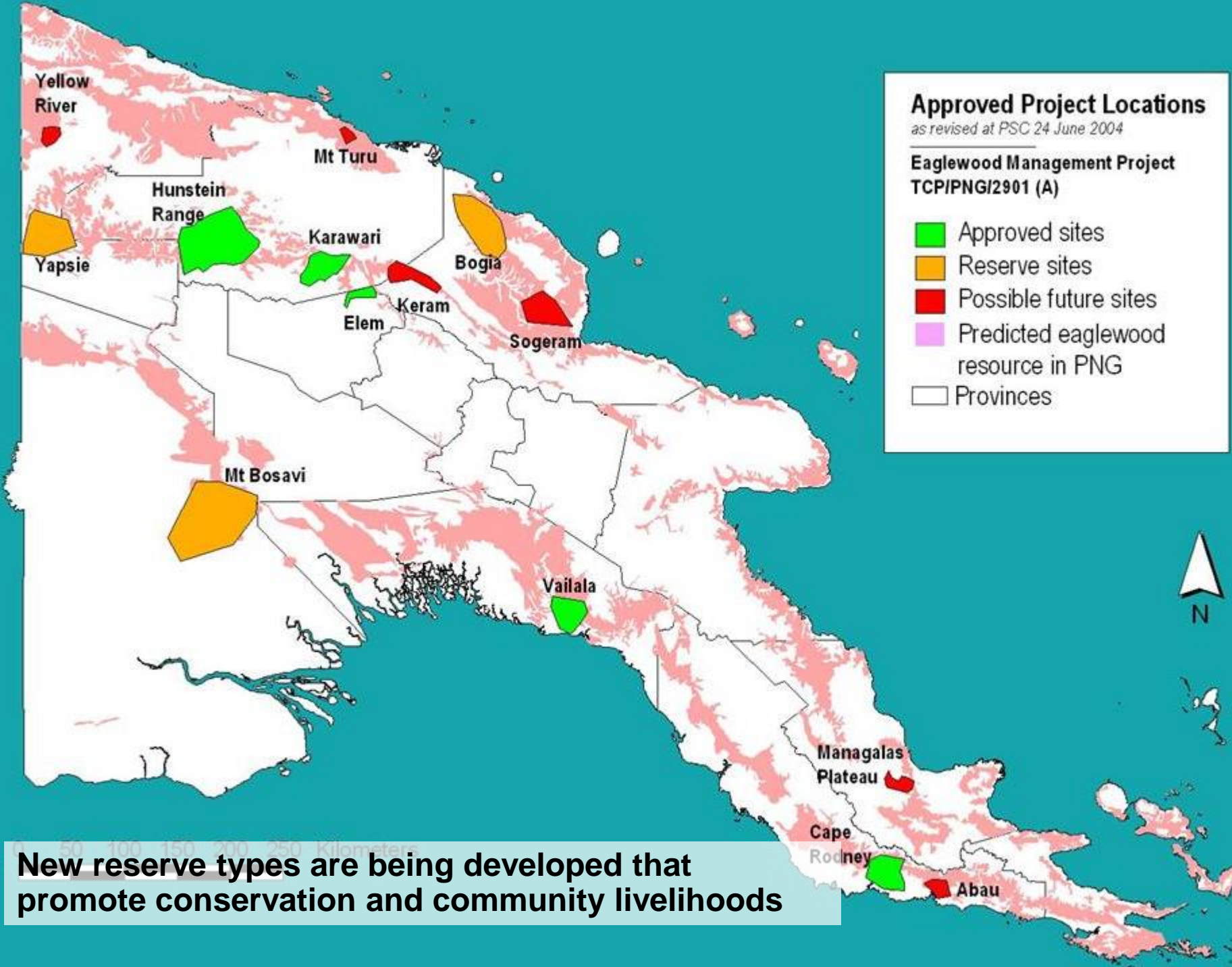
1. Wildlife Management Areas
2. Sanctuary
3. National Park
4. Historic Reserve
5. Memorial Park
6. Provincial Park
7. Protected Area
8. District Park
9. Conservation Area
10. Ramsar Sites
11. World Heritage Sites

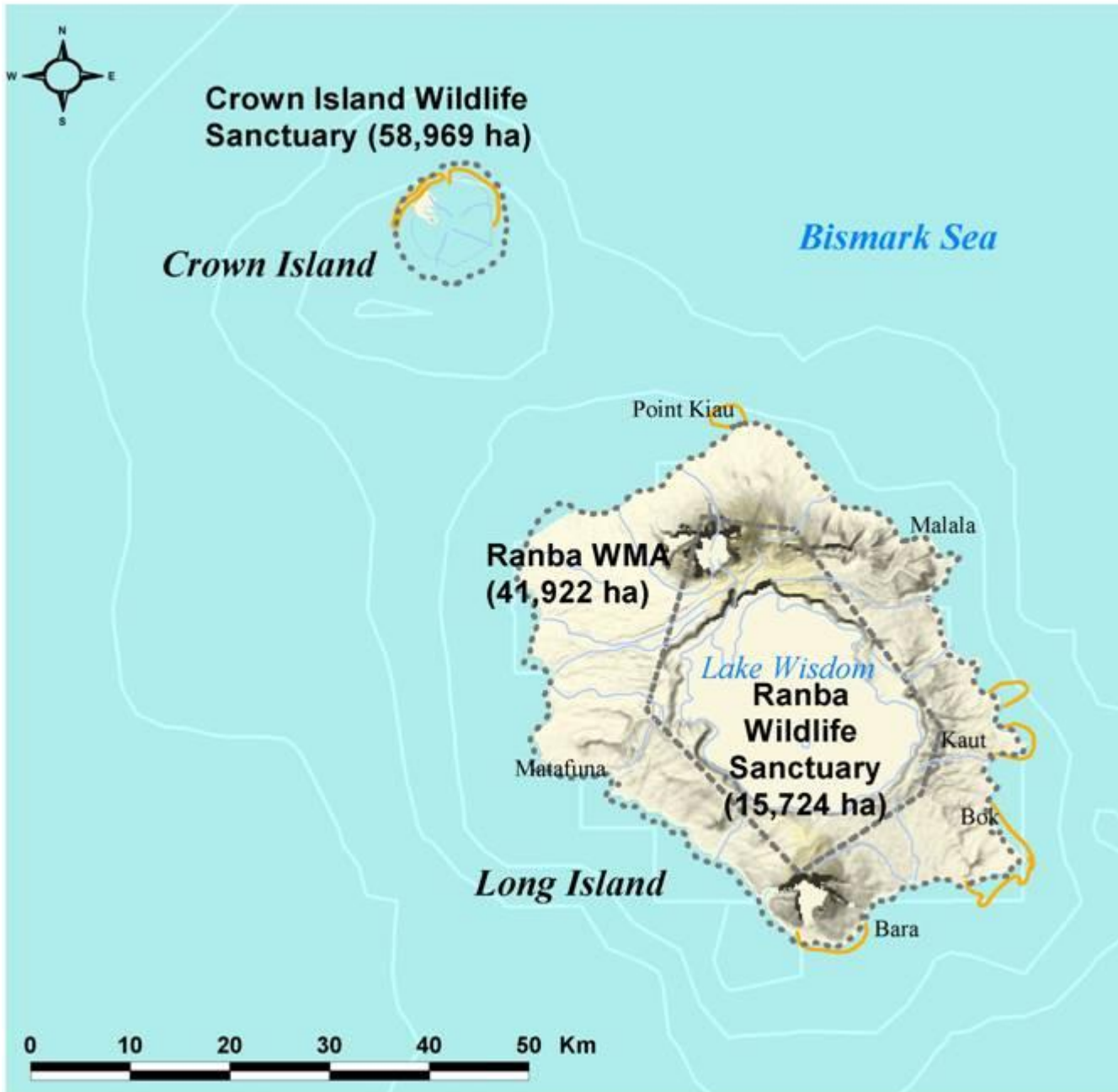
# Some operate outside of the formal PA system ...

12. Conservation Deed areas
13. LLG Conservation Areas
14. Informal or customary conservation areas
15. No fishing zones
16. ICDPs
17. Whale sanctuary
18. World Heritage Areas
19. Marine Protected Areas

**There has been a shift since Independence from the PAs that exclude communities (National Parks, Sanctuaries etc) to PAs that support local communities (WMAs)**



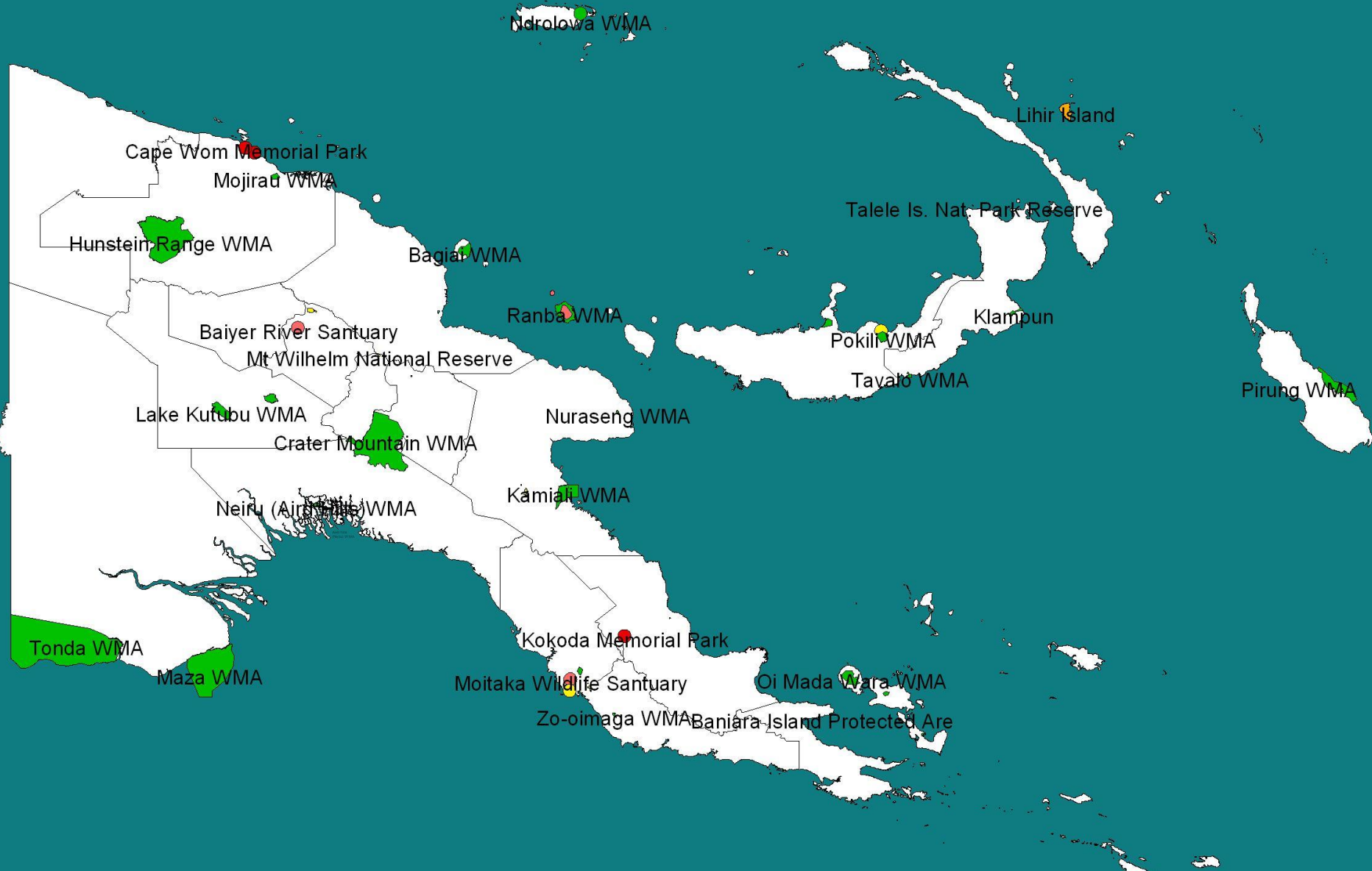




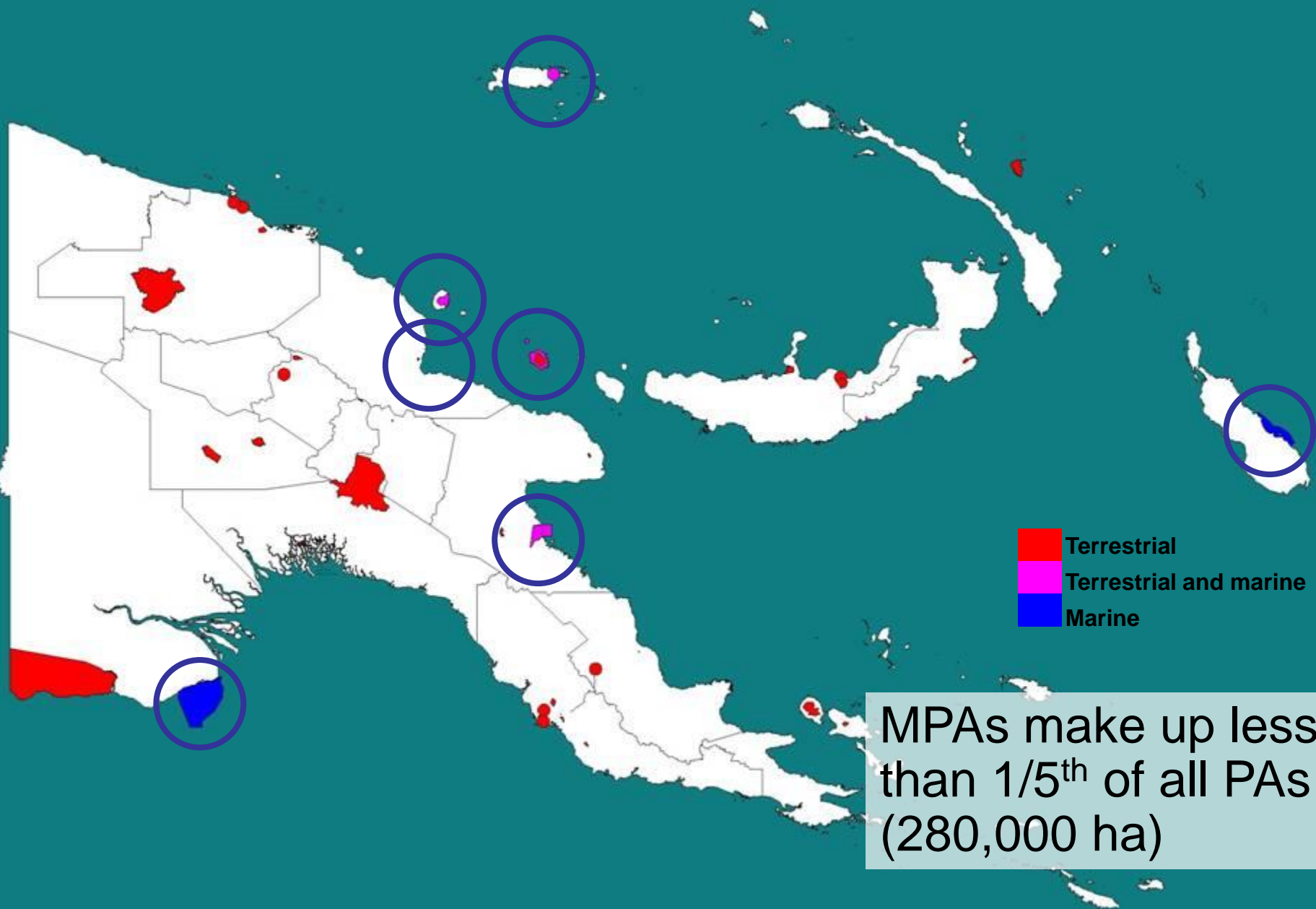
**Protected  
areas  
information  
is often  
inaccurate  
or absent**

Formal protected area cover is extremely low

51 PAs protect only **2.7%** of PNG's land area



... and less than **0.07%** of territorial waters



MPAs make up less than 1/5<sup>th</sup> of all PAs (280,000 ha)

# PNG rates very poorly against other countries



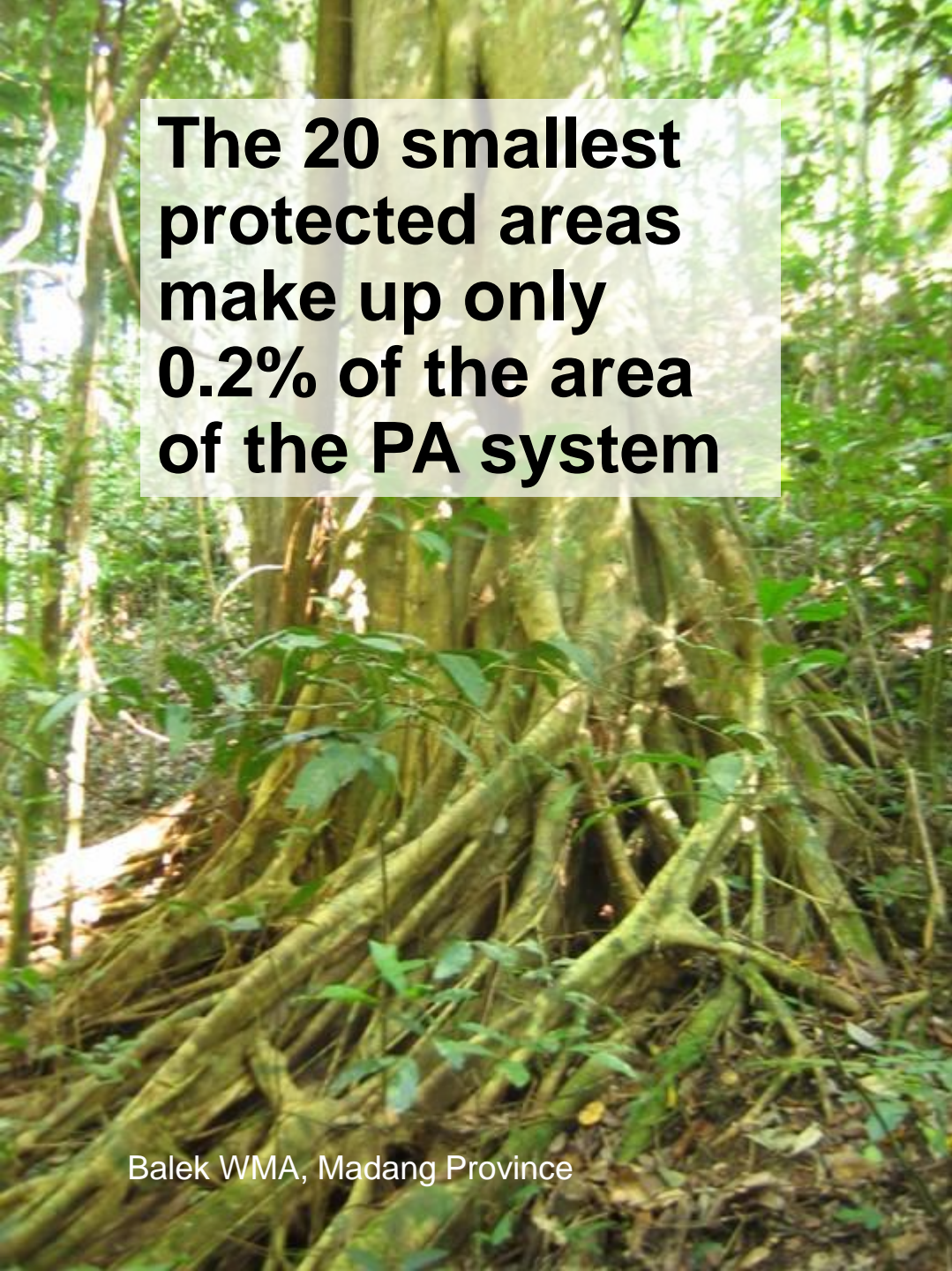


# Wildlife Management Areas account for 94% of PAs by area

<b>TYPE</b>	<b>NO</b>	<b>AREA (HA)</b>	<b>%</b>
<b>WILDLIFE MANAGEMENT AREA</b>	26	<b>1,539,119</b>	<b>94%</b>
<b>SANCTUARY</b>	5	<b>75,271</b>	<b>5%</b>
<b>PROTECTED AREA</b>	2	<b>20,245</b>	<b>1%</b>
<b>NATIONAL PARK</b>	7	<b>7,959</b>	<b>0.5%</b>
<b>PROVINCIAL PARK</b>	2	<b>177</b>	<b>0.01%</b>
<b>RESERVE</b>	3	<b>49</b>	<b>0.003%</b>
<b>MEMORIAL PARK</b>	3	<b>5</b>	<b>0.0003%</b>
<b>TOTAL</b>	<b>48</b>	<b>1,642,826</b>	<b>100%</b>

# 13 PAs over 10,000 ha account for 94% of PNG's PA system area

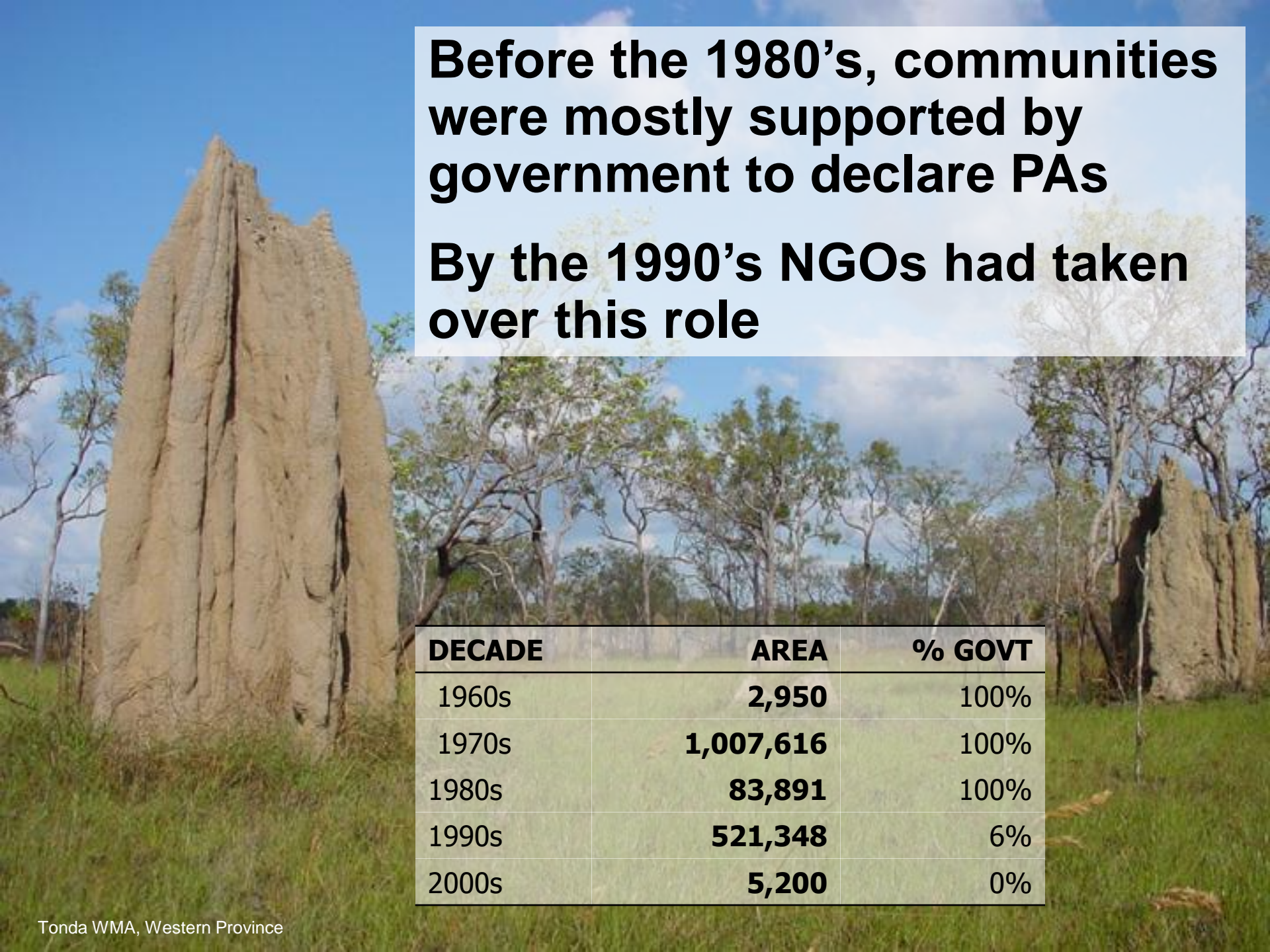
NAME	AREA (HA)
<b>Tonda WMA</b>	590,000
<b>Crater Mountain WMA</b>	270,000
<b>Hunstein Range WMA</b>	220,000
<b>Maza WMA</b>	184,230
<b>Kamiali WMA</b>	65,541
<b>Crown Island Wildlife Sanctuary</b>	58,969
<b>Pirung WMA</b>	43,200
<b>Ranba WMA + Sanctuary</b>	57,646
<b>Lake Kutubu WMA</b>	24,100
<b>Oi Mada Wara WMA</b>	22,840
<b>Lihir Island</b>	20,208
<b>Bagiai WMA</b>	13,760
<b>Siwi-Utame WMA</b>	12,540
<b>TOTAL</b>	<b>1,583,034</b>



**The 20 smallest  
protected areas  
make up only  
0.2% of the area  
of the PA system**

Balek WMA, Madang Province

Protected Area	Ha
<b>Mt Wilhelm National Reserve</b>	817
<b>Sawataetae WMA</b>	700
<b>Balek Wildlife Sanctuary</b>	470
<b>Hombareta WMA</b>	130
<b>Loroko National Park</b>	100
<b>Mt Gahavisuka Pro. Park</b>	77
<b>Baiyer River Sanctuary</b>	64
<b>Mt Susu National Park</b>	49
<b>Moitaka Wildlife Sanctuary</b>	44
<b>Baniara Island WMA</b>	37
<b>Namanatabu Reserve</b>	27
<b>Nuraseng WMA</b>	22
<b>Paga Hill Nat. Park Scenic R</b>	17
<b>Nanuk Island Reserve</b>	12
<b>Talele Is. Nat. Park Reserve</b>	12
<b>Kokoda Historical Reserve</b>	10
<b>Cape Wom Memorial Park</b>	2
<b>Wewak Peace Memorial Park</b>	2
<b>Kokoda Memorial Park</b>	1
<b>TOTAL</b>	<b>2,595</b>

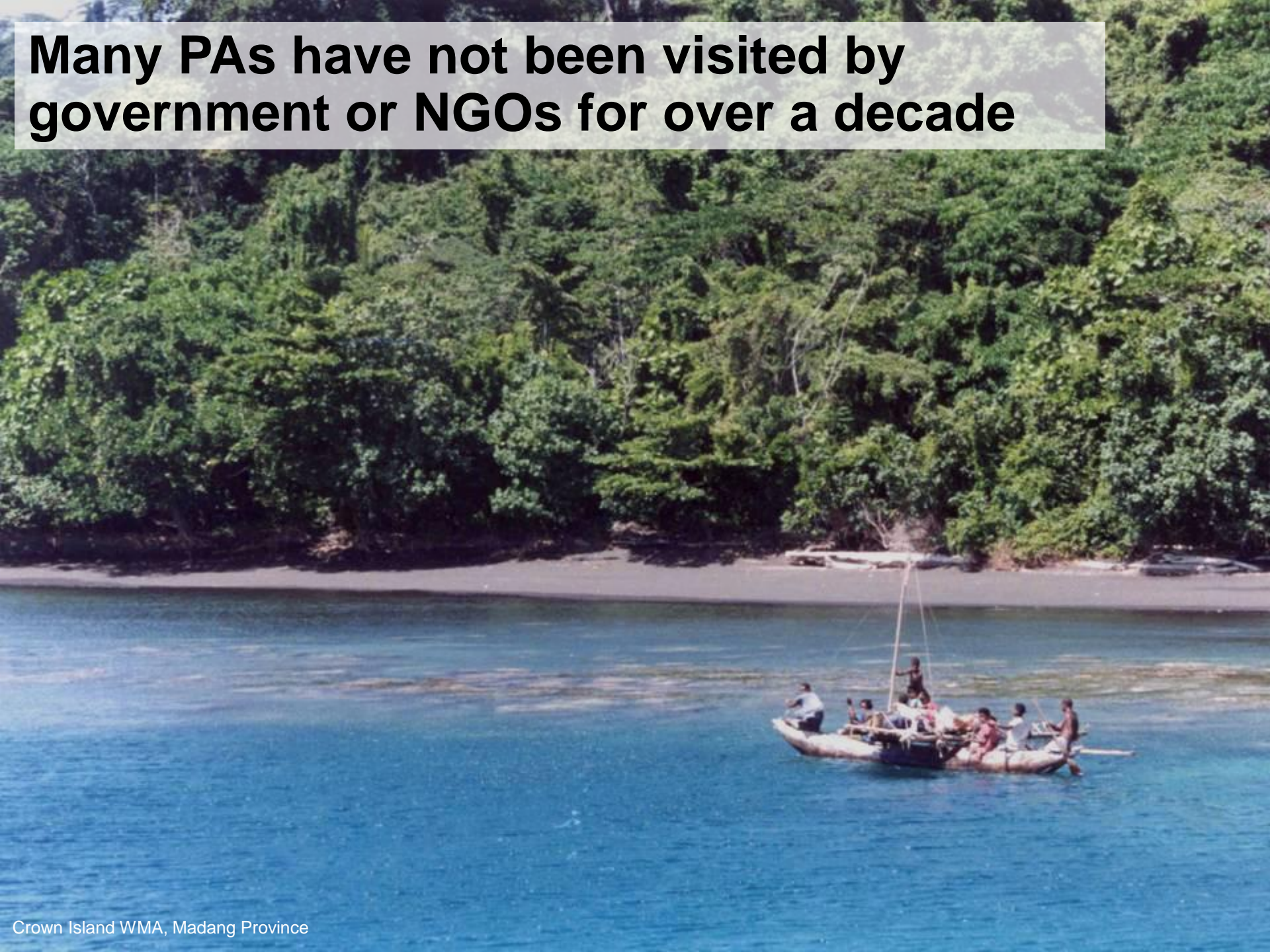


**Before the 1980's, communities were mostly supported by government to declare PAs**

**By the 1990's NGOs had taken over this role**

<b>DECADE</b>	<b>AREA</b>	<b>% GOVT</b>
1960s	<b>2,950</b>	100%
1970s	<b>1,007,616</b>	100%
1980s	<b>83,891</b>	100%
1990s	<b>521,348</b>	6%
2000s	<b>5,200</b>	0%

**Many PAs have not been visited by government or NGOs for over a decade**

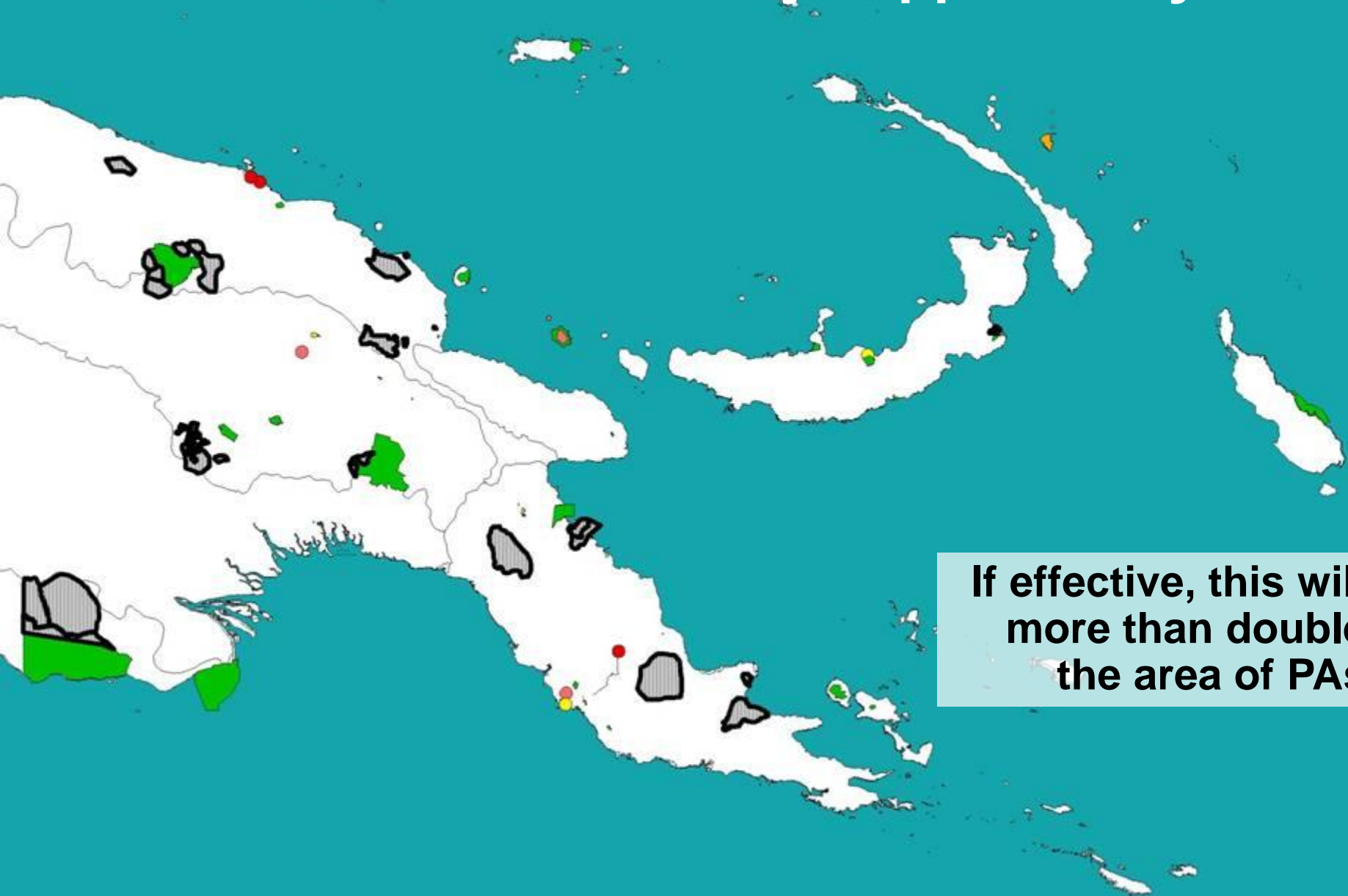


# Some communities visited were not aware that their land was a protected area

- **Bagiai WMA**
- **Crown Island WMA and Sanctuary**
- **Lihir Island PA**
- **Ranba WMA**



**A significant effort is underway to declare new  
PAs ...mostly supported by NGOs**



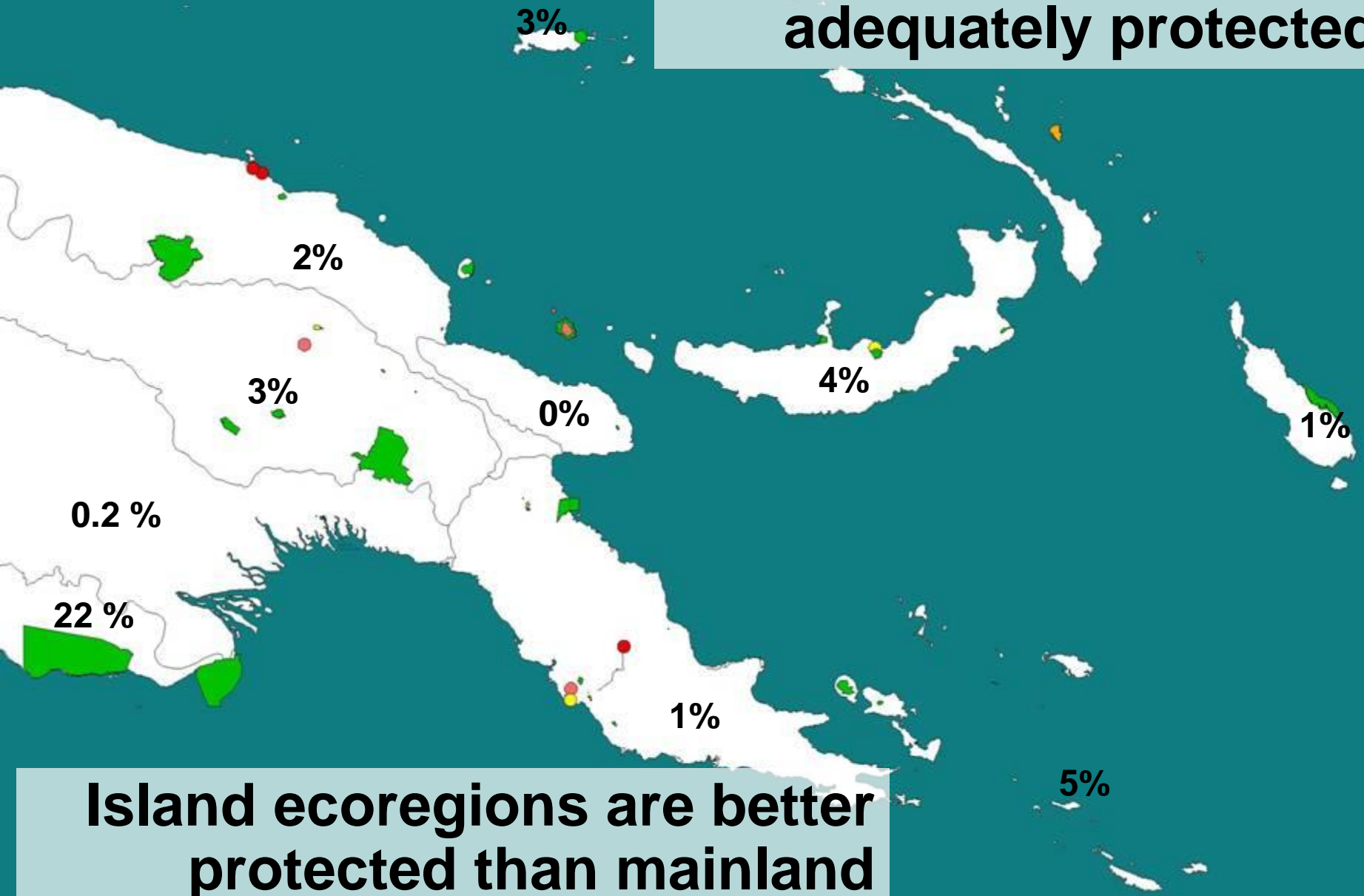
**If effective, this will  
more than double  
the area of PAs**

# Biological Representation



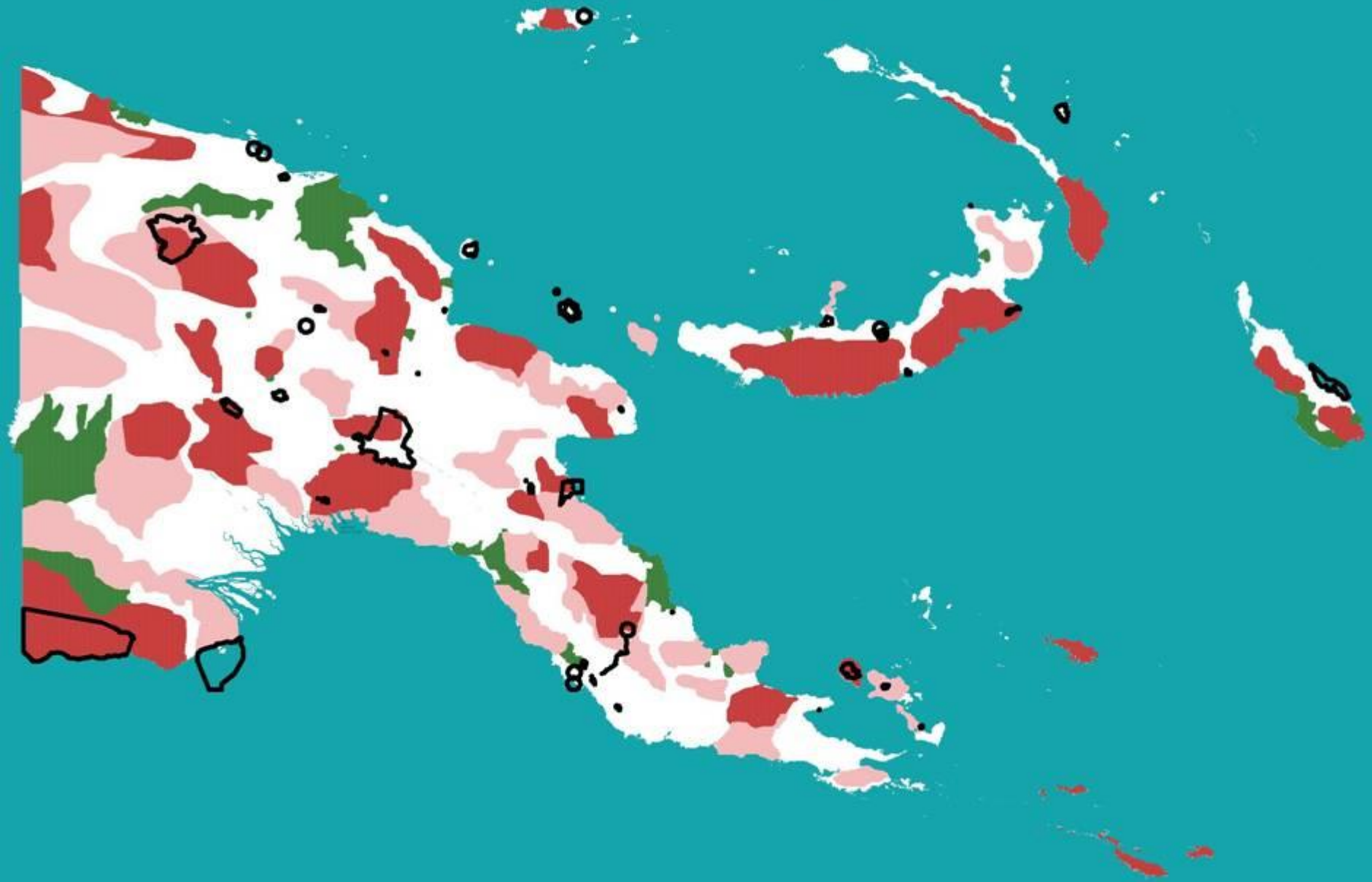


**Apart from the TransFly,  
no ecoregions is  
adequately protected**



**Island ecoregions are better  
protected than mainland**

# Less than one third of PAs protect habitat in CNA priority biodiversity areas



# Pressures and Threats



# Top pressures & threats

## Top 5 Pressures (current)

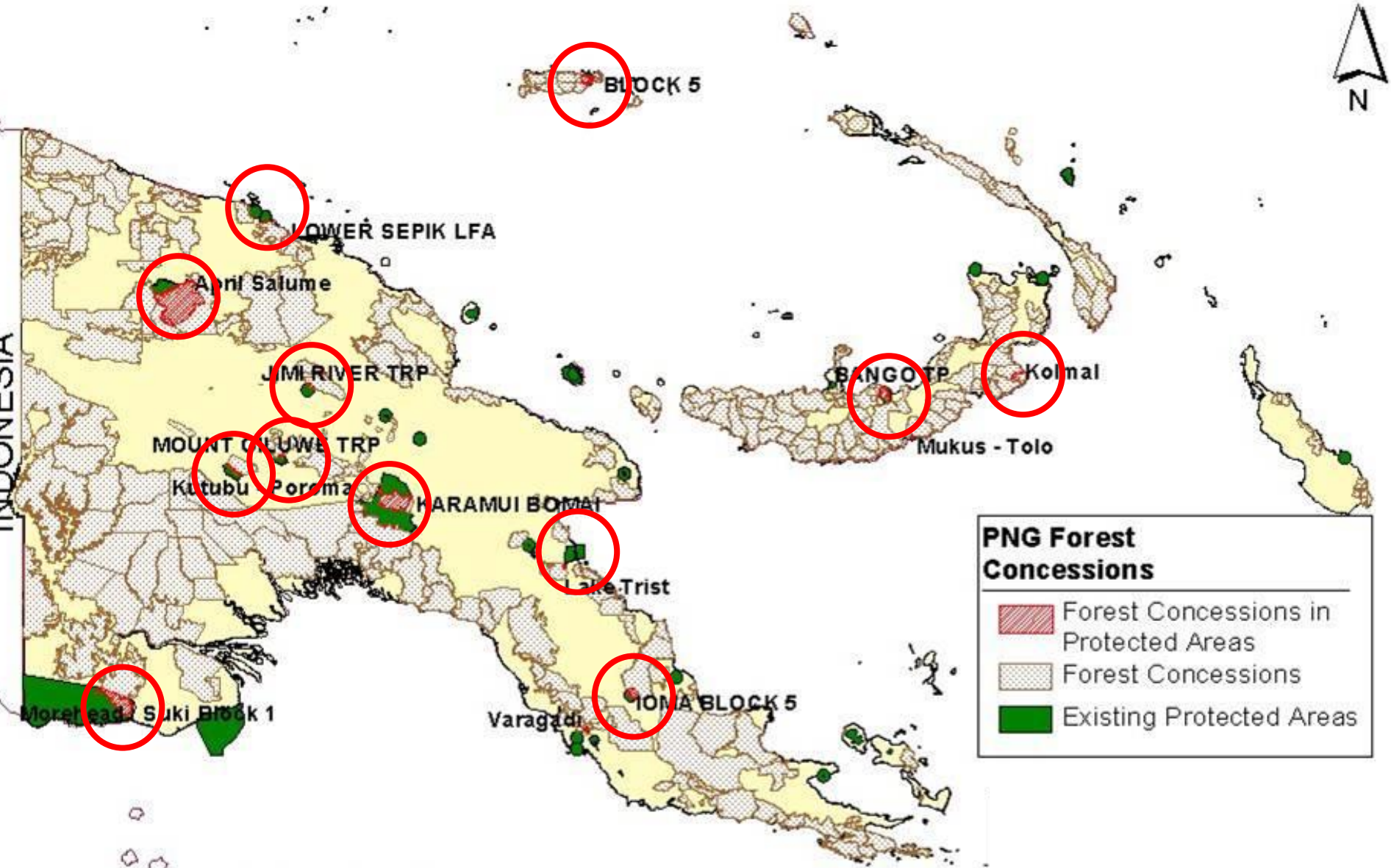
- Gardening
- Hunting
- Conversion for agriculture
- Subsistence harvesting
- Commercial overfishing

## Top 5 Threats (future)

- Logging
- Invasive species
- Hunting
- Mining
- Conversion for agriculture



# Nearly a quarter of all PAs are threatened by proposed forestry developments (12 of 51)



**Almost all of the MPAs threatened by industrial pollution are in Madang lagoon**



# USE OF METT



## Pa TRACKING TOOL

