Management Effectiveness Workshop

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Marinating Management Effectiveness - assessing management of Marine Protected Areas

Professor Marc Hockings
University of Queensland
Vice-Chair, IUCN World Commission on Protected Areas

Role of evaluation in protected area management

Protected areas play a critical role in biodiversity conservation' …

are 'natural solutions' to climate change…

and are vital to community health and well-being.

Effective management is *increasingly* essential to allow PAs to play this role in the face of escalating challenges – climate change, increasing resource demands, invasive species…
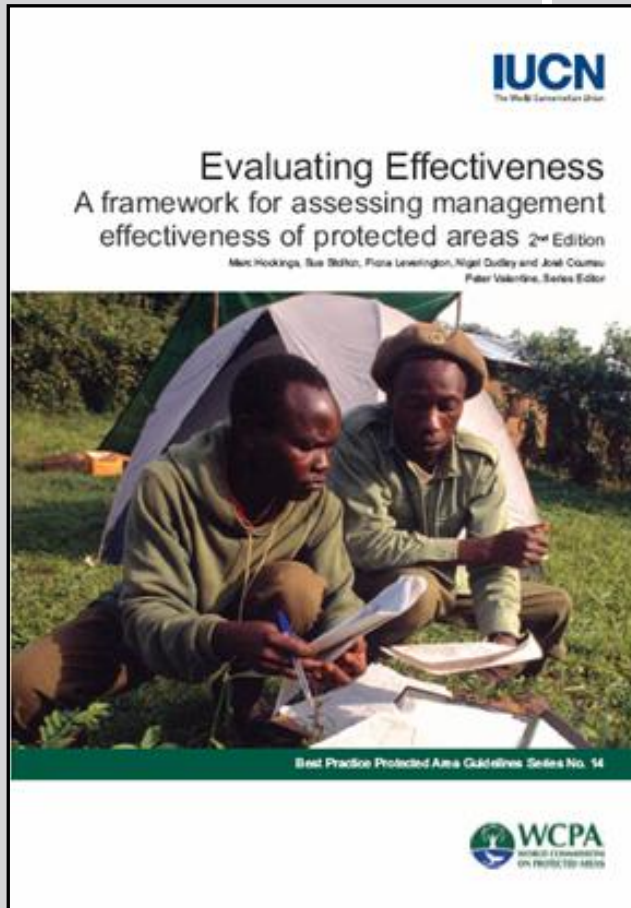
Evaluation – a critical part of management

Evaluation can:

- Help us manage better (adaptive management)

- Help reporting (promote accountability and transparency)

- Help allocate resources efficiently (prioritising)

- Help build a supporting constituency (stakeholder participation and understanding)

The WCPA Framework

| Elements of evaluation	Context *Where are we now?*	Planning *Where do we want to be?*	Inputs *What do we need?*	Process *How do we go about it?*	Outputs *What were the results?*	Outcomes *What did we achieve?*
Criteria	Significance Threats Vulnerability National policy Engagement of Partners	PA legislation and policy PA system design Reserve design Management planning	Resourcing of agency Resourcing of site	Suitability of management processes	Results of management actions Services and products	Impacts: effects of management in relation to objectives
Focus of evaluation	Status	Appropriate-ness	Economy	Efficiency	Effective-ness	Effectiveness Appropriate-ness

A Diversity of Methodologies

Methodologies vary in terms of

- Level of detail in assessment (rapid, intermediate, in-depth)

- Scale (single site, system)

- Type of data collected (qualitative, quantitative, mixed)

- WCPA elements assessed

- Management dimensions addressed

- Self assessment vs External assessment

- Internal or public reporting

Diverse methodologies
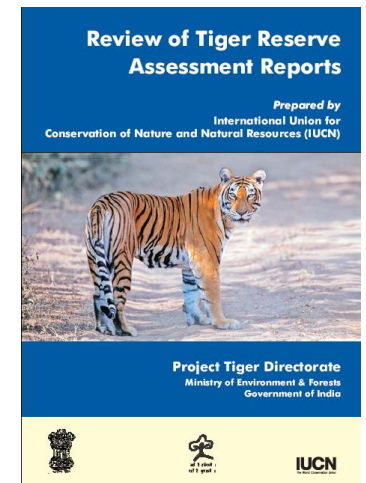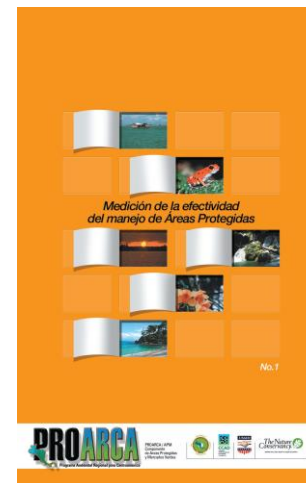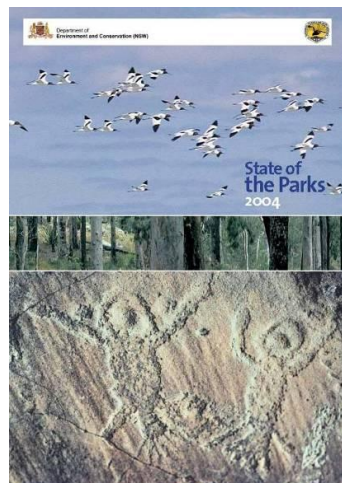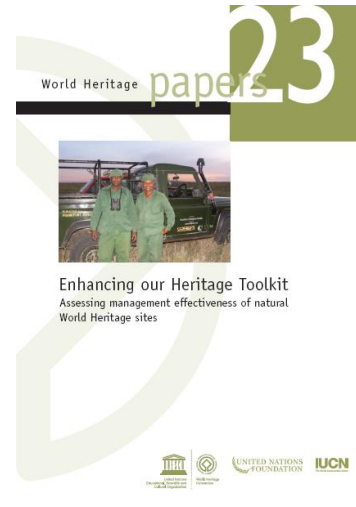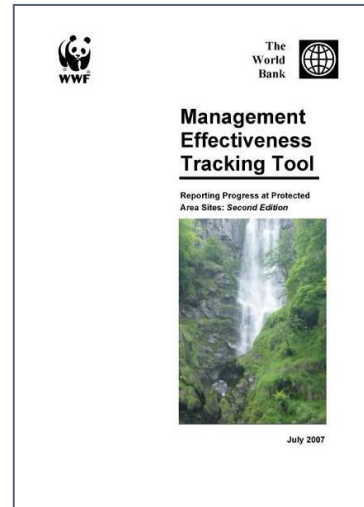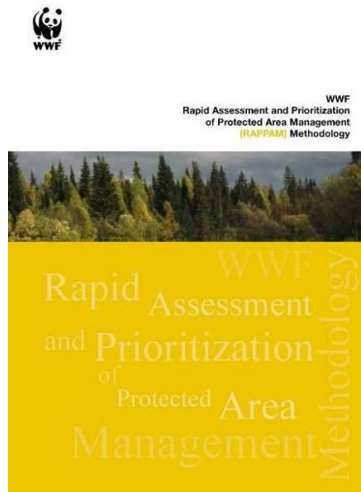
Site level assessments

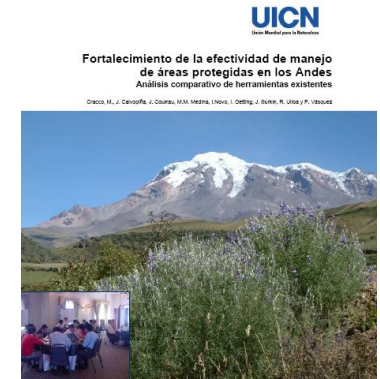- Provide detailed information that can be used to understand and improve management
- Involves site managers in evaluation – value of the process
- Can link to annual work programming and site management planning
- Focus on applying the information to adapt management

System level assessments

1. Most assessment system focus on the site level
2. There are a number of aspects of effective management of PAs that depend on system level characteristics and are not captured even when all PAs in a system are individually assessed
3. Adaptation of management at the system level may be essential to improve overall management and this should be guided and monitored by assessments at this scale
4. Can provide an opportunity for stakeholder and external expert input into assessments that is not possible with large site level assessment exercises

Management Effectiveness Evaluation has become part of the international agenda for protected area management

International Context – CBD Programme of Work on Protected Areas.

4.2.1 Develop and adopt, by 2006, appropriate methods, standards, criteria and indicators for evaluating the effectiveness of protected area management and governance ...

4.2.2 Implement management effectiveness evaluations of at least 30 percent of each Party's protected areas by 2010... (increased to 60% by 2015 at COP10 in Nagoya)

4.2.3 Include information resulting from evaluation of protected areas management effectiveness in national reports under the Convention on Biological Diversity.

4.2.4 Implement key recommendations arising from site- and system-level management effectiveness evaluations, as an integral part of adaptive management strategies.

COP10 – CBD Strategic Plan Target 11

Target 11 calls for at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas to be conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas

International Context

2010 Biodiversity Indicators – Protected Area Indicators

- Coverage of Protected Areas

- Overlay of protected areas with key areas for biodiversity

- Protected Area Management Effectiveness (PAME)

International Context

2010 Biodiversity Indicator Results
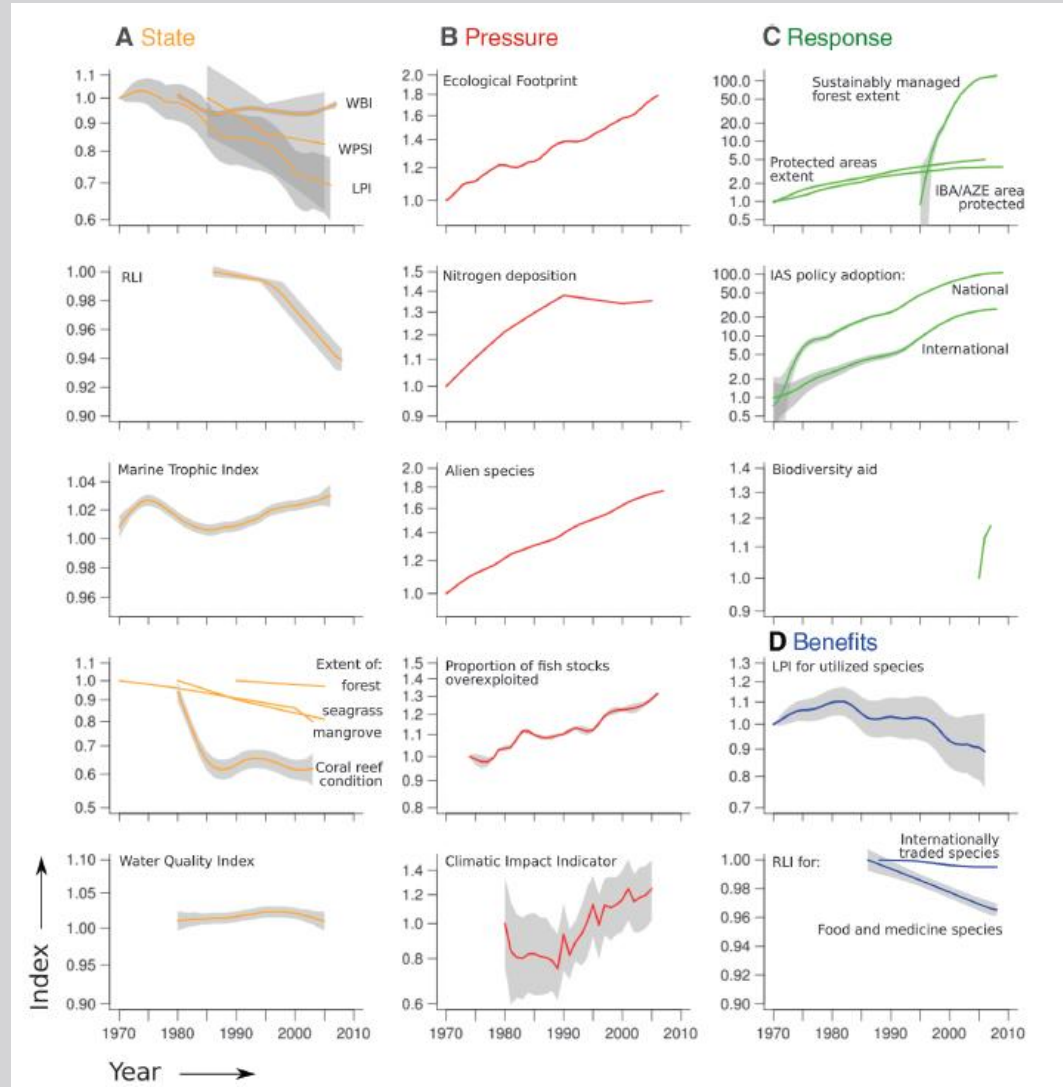
Global Study of PA Management Effectiveness (PAME)

Three Key Objectives

1. What has been done? – Assess progress towards the PoWPA targets for PAME
2. Status of parks, key threats, factors influencing effectiveness of management.
3. Integrate management effectiveness information into the World Database on Protected Areas.

Adopt PAME systems

1. PAME studies undertaken in 128 countries using more than 45 methodologies (most based in IUCN-WCPA PAME Framework
2. Systems for PAME adopted in Korea, Finland, India, many Central and South American countries, Australia, Mexico etc.
3. Systems being developed in South Africa, Thailand , Scotland
4. Many other systems that we are learning about through this and other studies
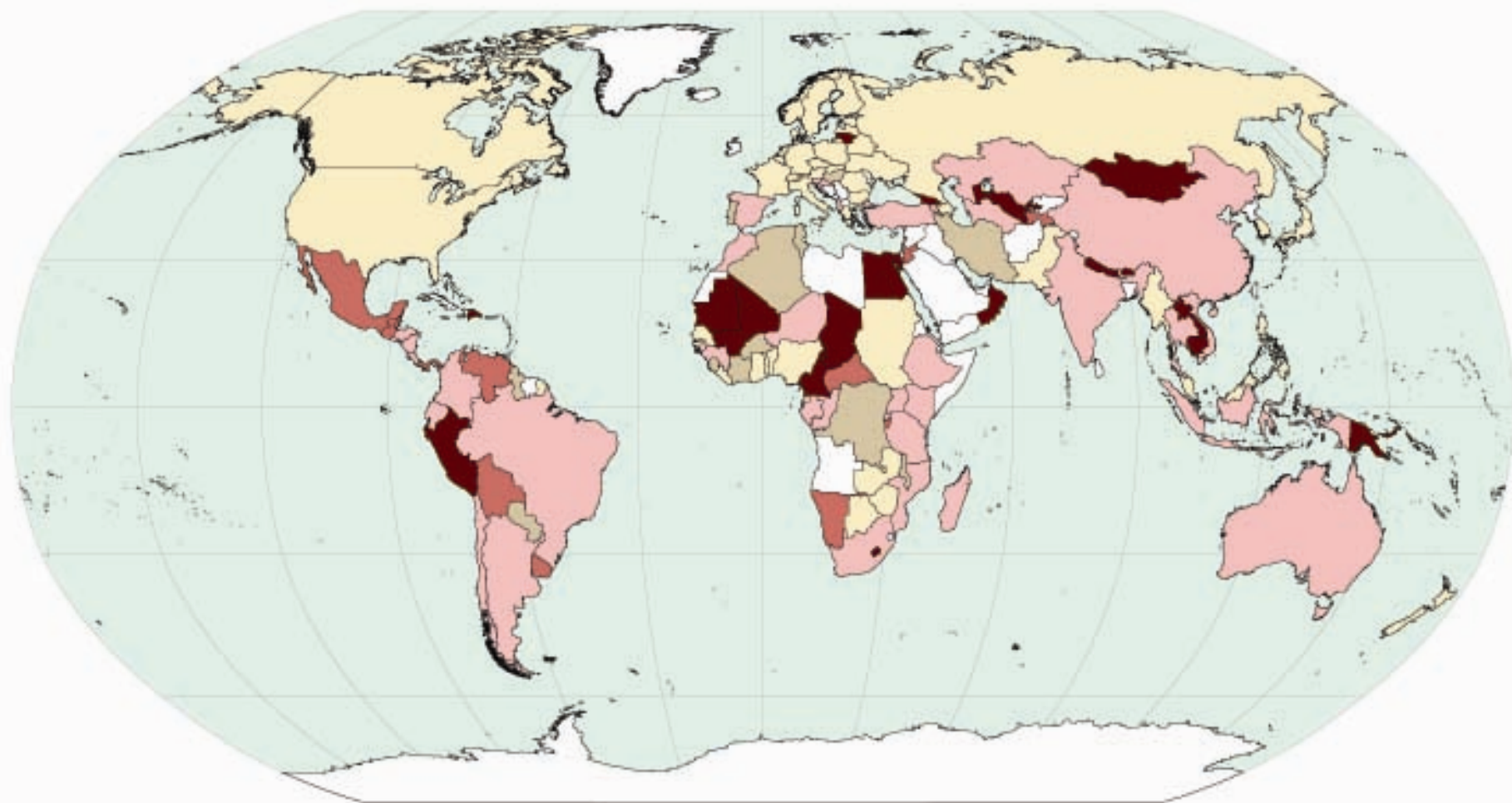
Percentage of sites assessed (number)

Under 5% | 5 - 10% | 10 - 30% | 30 - 50% | over 50% | No Data

MEE in MPAs

1. Global MEE database records assessments from 355 MPAs over period 1999-2009
2. A number of significant MPA studies undertaken since 2009 (Thailand MPA study, Galapagos assessment)
3. Other MEE studies include MPAs (Colombia AEMAPPS, Victorian State of Parks)
4. Other studies reported today that are not included in the Global Study dataset

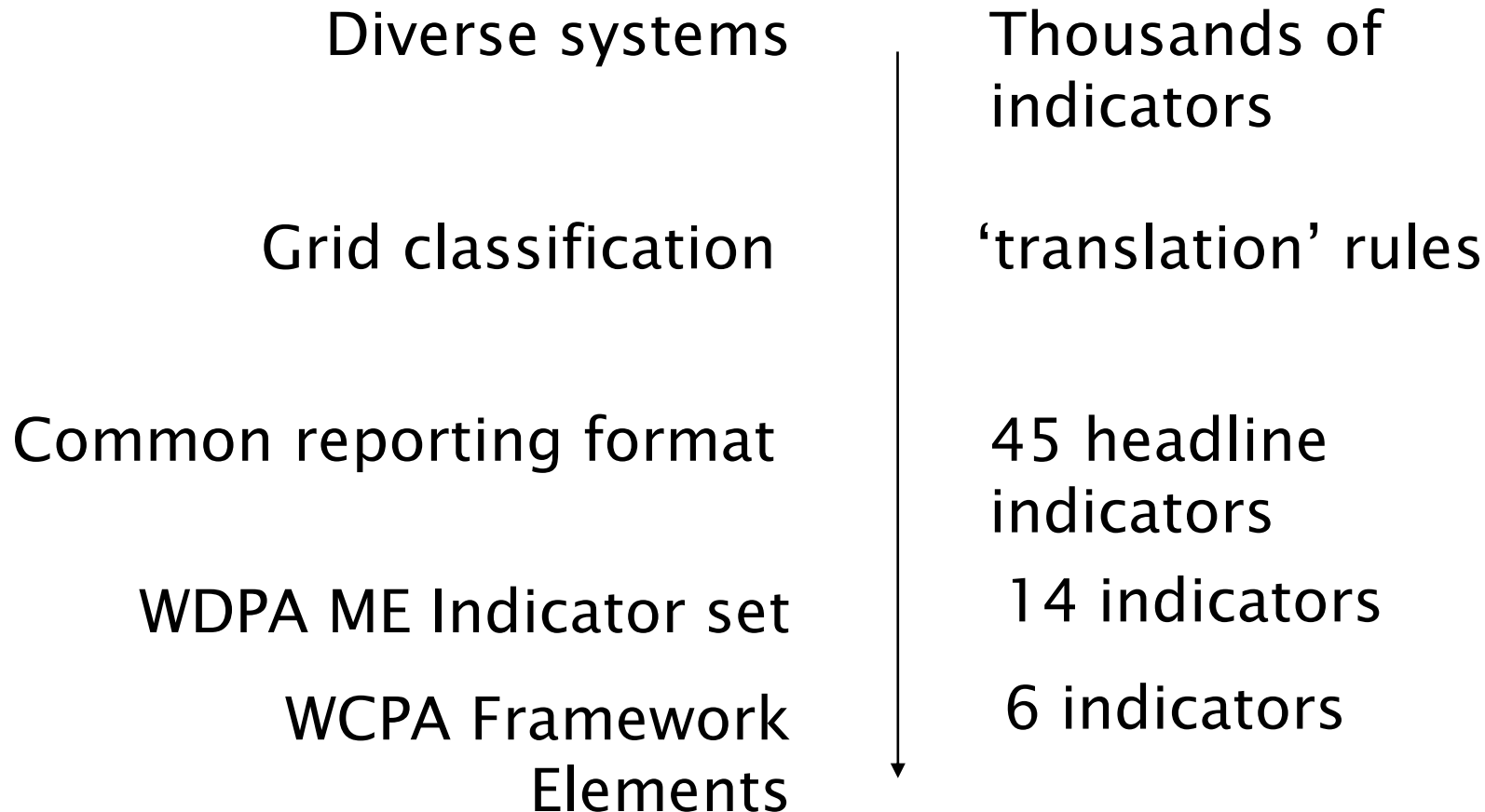|		
■ AEMAPPS	■ Africa rainforest study	■ Asturias INDESPAR
■ Belize Management Effectveness Evaluation	■ Birdlife Important Bird Areas evaluation	■ Brazil 1999
■ Catalonia Management Effectiveness Evaluation	■ Central African Republic	■ Conservation International Management Effectivness Tracking Tool
■ Ecuador Management Effectiveness Evaluation	■ Enhancing our Heritage	■ European diploma
■ European SCS	■ French National Parks	■ Galápagos Management Effectiveness Evaluation
■ GBRMPA Outlook Report	■ German Nature Parks	■ GOBI survey
■ India Tiger Reserve Assessment	■ Italy quality park project	■ Korea Management Effectiveness Evaluation
■ Korea METT	■ Marine tracking tool	■ MARIPA-G
■ Indian Management Effectiveness Evaluation	■ MEMS	■ METT-RAPPAM crossover
■ MPA Management Effectiveness Evaluation	■ Netherlands quality test	■ NPAPA England
■ NSW State of Parks	■ PA Consolidation index	■ Padovan 2002
■ PANPARKS	■ Parks Canada	■ Parks profiles
■ PIP Site consolidation	■ PROARCA/CAPAS	■ RAPPAM
■ Scenery matrix	■ Schrader German BR	■ Scotland LNR
■ SIMEC	■ Stockholm BR Survey	■ Tasmanian WHA
■ Management Efectiveness Tracking tool (METT)	■ USA SOP	■ Valdiviana
■ Venezuela Vision	■ Victorian SOP	■ West Indian Ocean MPA
■ Wetland tracking tool	■ WWF/CATIE	

MPA's assessed	Overall	Africa	Asia	Europe	LAC	Oceania
1999	1	0	1	0	0	0
2000	2	0	0	0	2	0
2001	16	8	1	3	4	0
2002	4	0	0	0	4	0
2003	7	2	1	0	4	0
2004	29	0	17	0	0	12
2005	54	2	31	5	9	7
2006	118	20	3	11	82	2
2007	18	14	0	1	0	3
2008	51	2	8	20	3	18
2009	15	0	0	9	6	0

Global Study Analysis

1. Data is available from approximately half of the PAME studies
2. Grouped individual indicators into 45 "headline" indicators and rescaled results into a common 0 to 1 format

Common reporting format and management effectiveness indicator

Diverse systems	Thousands of indicators
Grid classification	'translation' rules
Common reporting format	45 headline indicators
WDPA ME Indicator set	14 indicators
WCPA Framework Elements	6 indicators

WCPA Framework Element	WDPA ME indicator	Common reporting format 'headline indicators'
Context	1.Value and significance	Five important values
		Level of significance
	2. Threats and constraints	Five important threats
		Level of extent and severity of threats
		Trend of threats
		Constraint or support from external political and civil environment
		Main constraining factors of external political and civil environment
Planning	3. Site design and establishment	Park gazettal and tenure security
		Adequacy of legislation
		Marking and security/ fencing of park boundaries
		Appropriateness of design
	4. Management Planning	Management plan

WCPA Framework Element	WDPA ME indicator	Common reporting format 'headline indicators'
Input	5. Management resources	Adequacy of staff numbers
		Adequacy of current funding
		Security/ reliability of funding
		Adequacy of infrastructure, equipment and facilities
	6. Information base	Adequacy of relevant and available information for management

WCPA Framework Element	WDPA ME indicator	Common reporting format 'headline indicators'
Process	**7. Internal management systems and processes**	Effectiveness of administration including financial management
		Effectiveness of governance and leadership
		Management effectiveness evaluation undertaken
		Model of governance
		Adequacy of building and maintenance systems
		Adequacy of human resource mgt policies and procedures
		Adequacy of staff training
		Staff morale
		Staff/ other management partners skill level
	8. Law enforcement	Adequacy of law enforcement capacity
		List (up to) five main issues for law enforcement
	9. Stakeholder relations	Appropriate program of community benefit/ assistance
		Communication program
		Involvement of communities and stakeholders
		List community benefit/ assistance program
	10. Visitor management	Character of visitor facilities and services
		Level of visitor use
		Visitors catered for and impacts managed appropriately
	11. Natural and cultural resource management systems	Natural resource and cultural protection activities undertaken
		Sustainable resource use - management and audit
		Research and monitoring of natural/ cultural management
		Threat monitoring

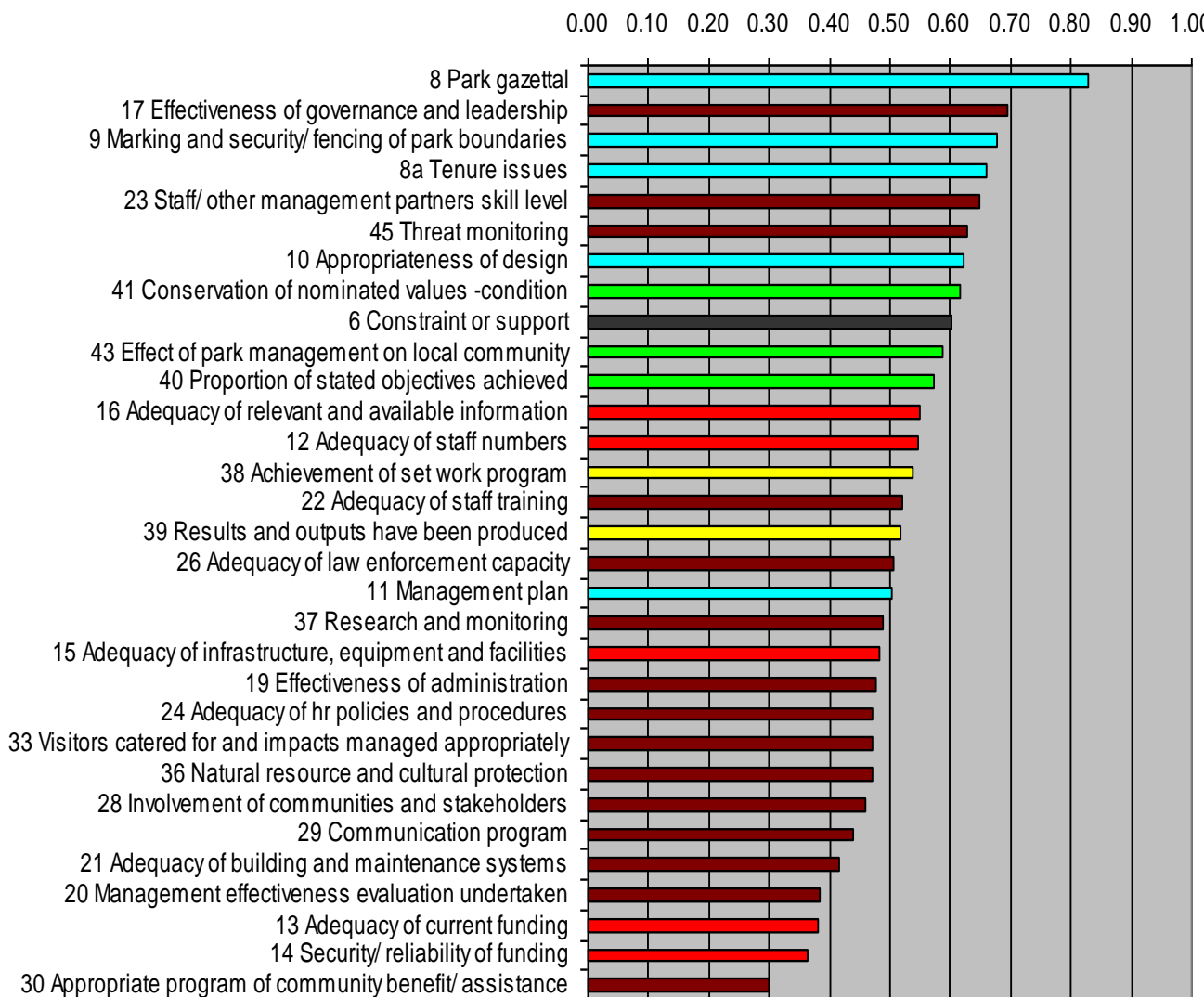| WCPA Framework Element	WDPA ME indicator	Common reporting format 'headline indicators'
Outputs	12. Achievement of work program	Achievement of set work program
		Activities/ services and outputs have been produced
Outcomes	13. Conservation outcomes	Proportion of stated objectives achieved
		Conservation of nominated values - trend
		Conservation of nominated values - condition
	14. Community outcomes	Effect of park management on local community
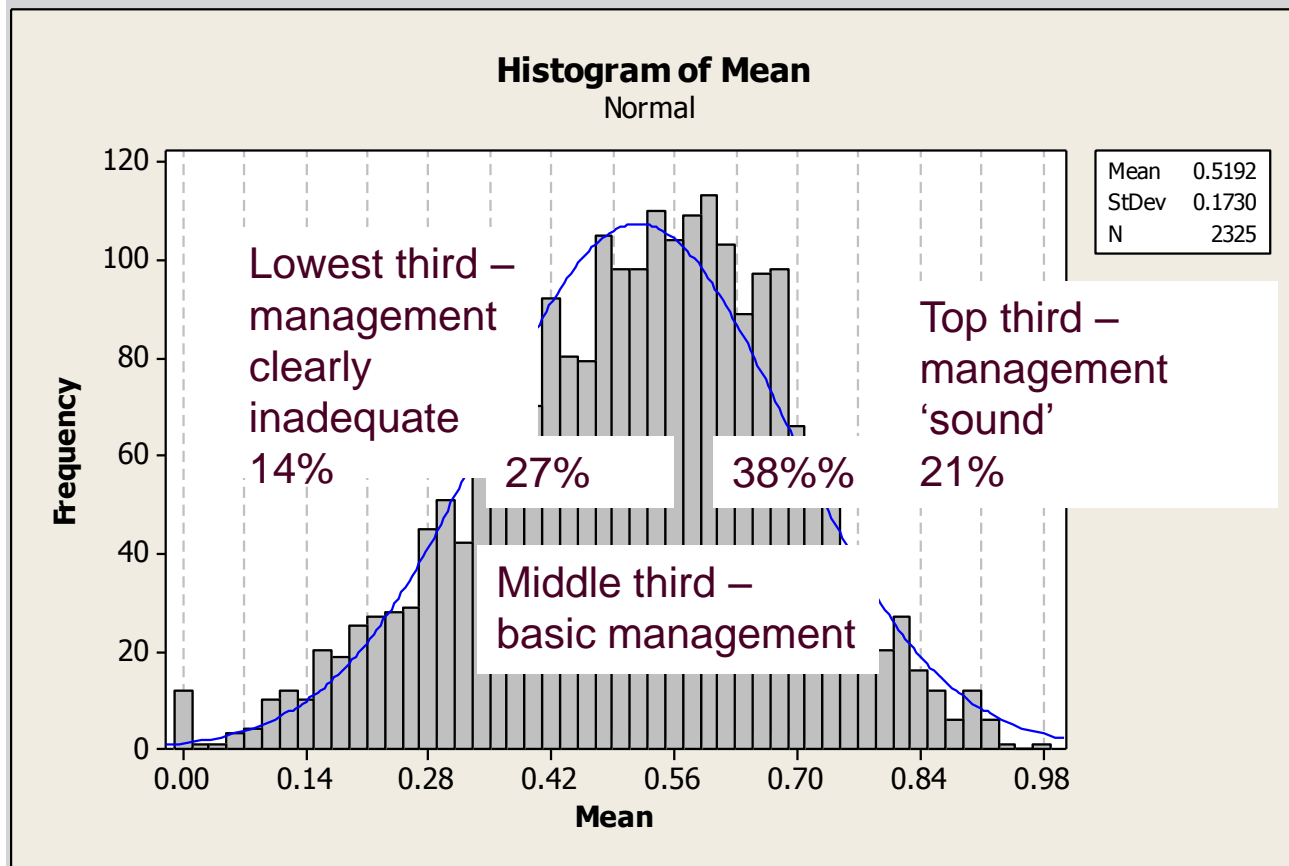
Marine Protected Areas

Global ME Database overall scores for MPAs
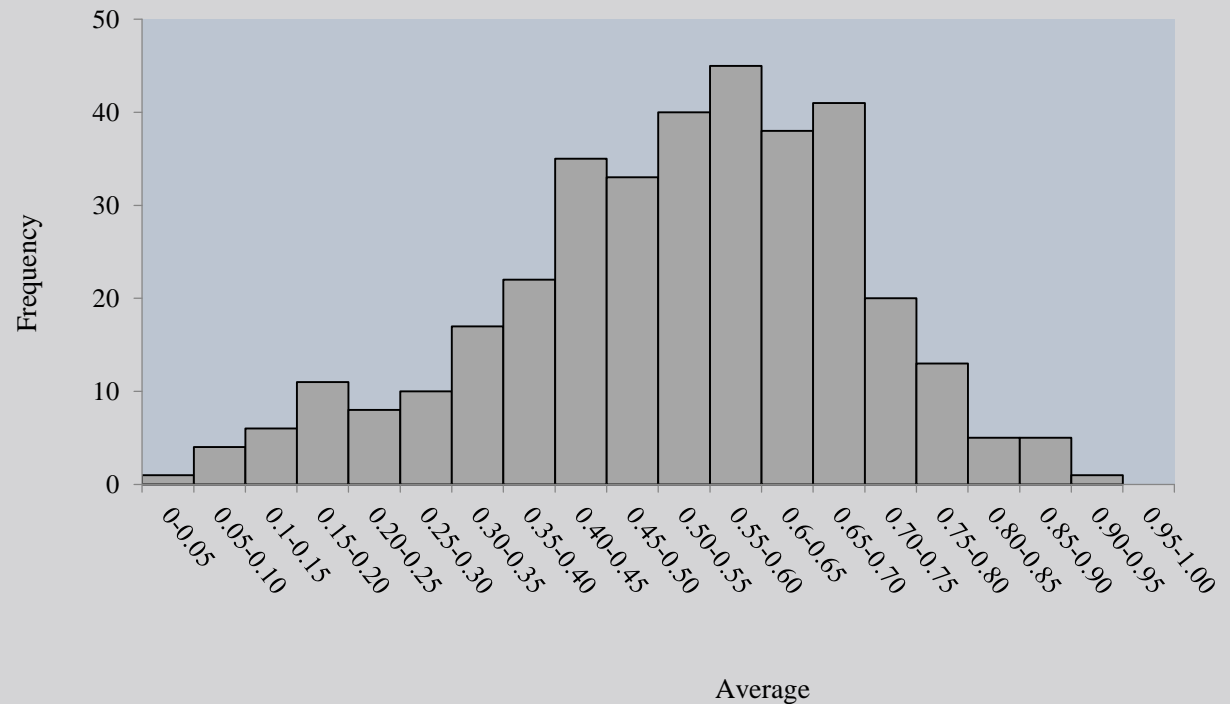
Mean score for MPAs identical to mean for all PA data

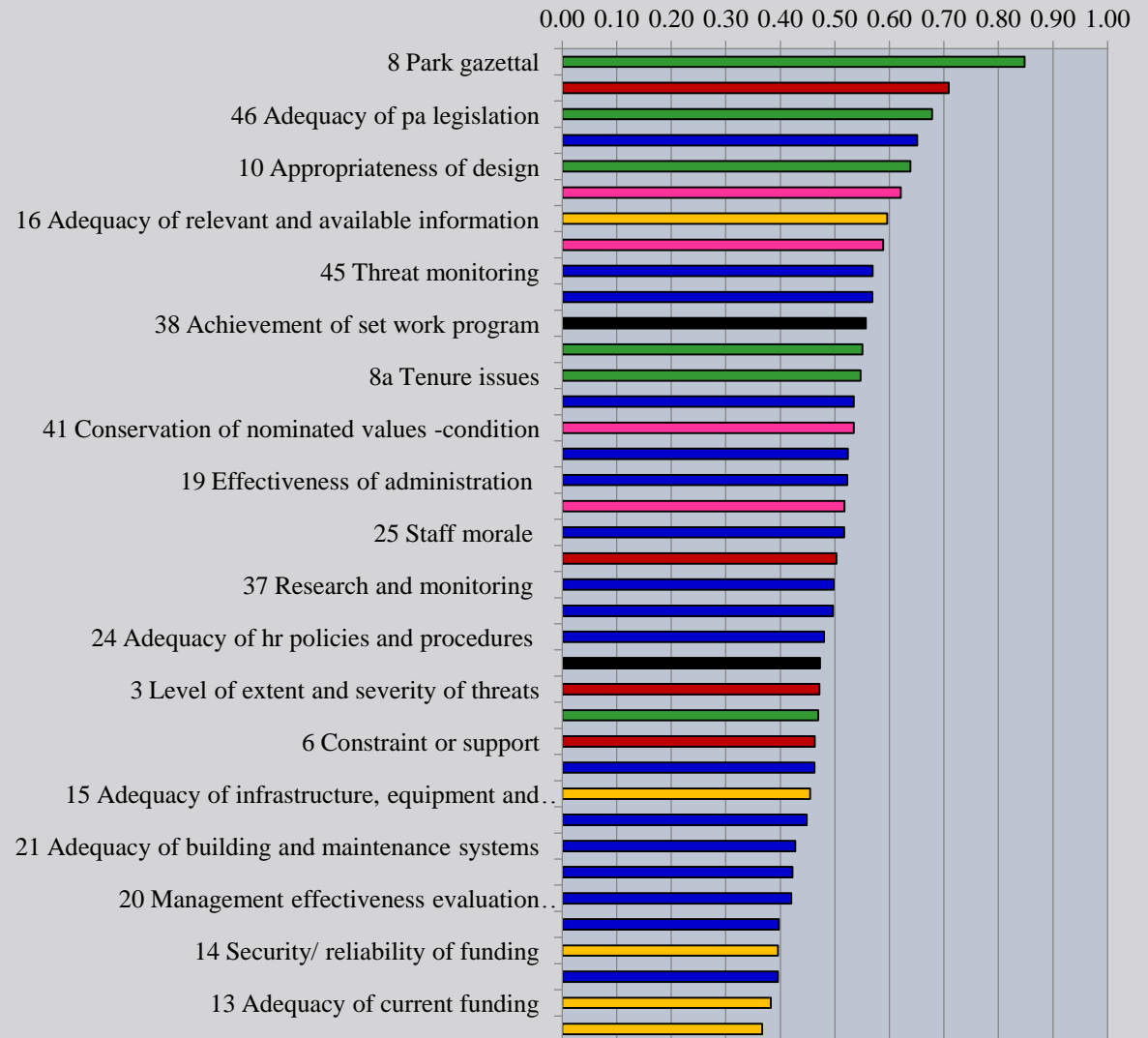PAME Global study results

Performance of indicators

Marine Protected Areas

Performance of indicators

Summary by WCPA Element

	Mean	Sample
Average inputs	0.50	2302
Average planning	0.64	2305
Average process	0.49	2336
• Governance processes	0.51	2301
• Community processes	0.45	2189
• Environmental processes	0.49	2199
Average output	0.53	1368
Average outcome	0.60	2196

Most commonly reported threats

Number of reports nominating threat

Legend: Total Asia (of 14) | AFRICA total (12) | TOTAL EUROPE (9) | Total LAC (9) | TOTAL OCEANIA (3)

Threats (top to bottom):
- 5.1 Hunting, killing & collecting terrestrial animals
- 5.3 Logging & wood harvesting
- 5.2 Gathering terrestrial plants or plant products (non-timber)
- 6.1 Recreational activities
- 7.3c Edge effects, adjacent land use, buffer zone issues
- 2.3 Livestock farming & grazing within protected area
- 7.3 Other Ecosystem Modifications
- 1.1 Housing & settlement within protected area
- 7.1 Fire & Fire Suppression
- 9 Pollution (all types)
- 8.1 Invasive Non-Native/Alien Plants
- 3.2 Mining & quarrying
- 2.1 Annual & perennial non-timber crops within protected area
- 5.4 Fishing, killing & harvesting aquatic resources
- 4.1 Roads & Railroads
- 7.2 Dams & Water Management/Use
- 8.1a Invasive Non-Native/Alien Animals
- 11.1 Habitat shifting & alteration
- 3.3 Renewable Energy
- 7.3b Increased isolation from other natural habitat
- 4.2 Utility & Service Lines
- 7.3a Fragmentation within protected area
- 3.1 Oil & gas drilling
- 12.3 Destruction of cultural heritage

PAME Global study results

Strongest aspects of management

1. Park establishment (gazettal, boundary marking, tenure issues, PA design)
2. Conservation of key values, achievement of management outputs and outcomes.
3. Governance

Marine Protected Areas

Strongest aspects of management

1. Park establishment (gazettal, tenure issues, PA design)
2. Adequacy of legislation
3. Governance

PAME Global study results

Weakest aspects of management

1. Programs of community benefit and assistance
2. Adequacy, security and reliability of funding
3. Communication programs
4. Involvement of communities and stakeholders
5. Building and maintenance systems

Marine Protected Areas

Weakest aspects of management

1. Adequacy of staffing, training, skill levels
2. Adequacy, security and reliability of funding
3. Visitors catered for and impacts managed
4. Programs of community benefit and assistance
5. Management effectiveness studies

PAME Global study results

Highest correlation of individual indicators with overall Management Effectiveness

1. Communication program
2. Natural and cultural resource management programs
3. Management plans
4. Involvement of communities and stakeholders

PAME Global study results

Highest correlations with Outcomes

Biodiversity outcomes
1. Skills of staff
2. Resolution of tenure issues
3. Achievement of work program
4. Effectiveness of law enforcement

Community outcomes
1. Communication program
2. Program of community benefit
3. Involvement of communities and stakeholders

Marine Protected Areas

Correlations between indicators

Headline indictors	Outcome indicators		
	Conservation of nominated values - condition	Conservation of nominated values –trend	Effect of park management on local community
Level of significance	0.86** (21)	0.93** (10)	0.47** (148)
Level of extent and severity of threats	0.45** (13)	0.57** (13)	
Constraint or support	0.47** (55)		
Tenure issues	0.74** (10)		
Management effectiveness evaluation undertaken			0.49** (57)
Staff/ other management partners skill level	0.53*(10)		
25 Staff morale	0.60** (28)	0.53** (26)	
32 Sustainable resource use	-0.75** (13)		
39 Results and outputs have been produced		0.61* (10)	

Introduction to MEE

Questions

Thank - you