

JABAL MOUSSA

Biosphere Reserve

MOUNT LEBANON



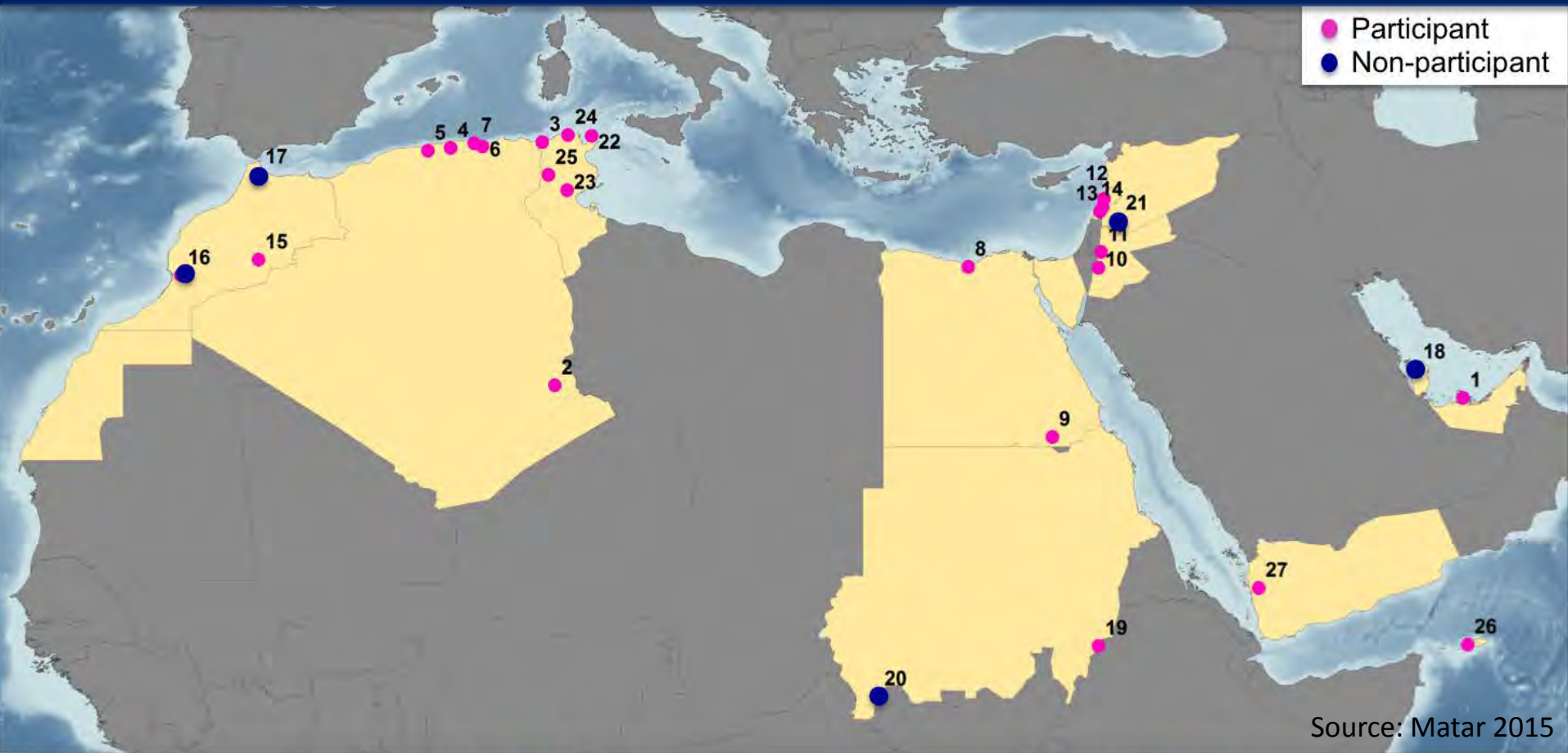
4th World Congress of Biosphere Reserves
March, 2016

Management Effectiveness of BRs within ArabMAB

- **ABSTRACT OF DOCTORAL DISSERTATION BY DIANE MATAR , NOVEMBER 2015 (Central European University)¹**
- **“CONCEPT IMPLEMENTATION AND MANAGEMENT EFFECTIVENESS OF BIOSPHERE RESERVES IN THE ARAB REGION”**
- **MIXED-METHOD APPROACH USING ON-LINE SURVEYS, DOCUMENT REVIEW OF PERIODIC REVIEW REPORTS AND FACE-TO-FACE INTERVIEWS**
- **ASSESSMENT USING 34 INDICATORS CONFORMING TO “GLOBAL STUDY”² ON 3184 PROTECTED AREAS**



High participation rate: 22/27 BRs (2014)



Source: Matar 2015

UAE	● 1. Marawah	Jordan	● 10. Dana	Sudan	● 19. Dinder
Algeria	● 2. Tassili N'Ajjer		● 11. Mujib	● 20. Radom	● 21. Lajat
	● 3. El Kala	Lebanon	● 12. Jabal Moussa	Syria	● 22. Iles Zembra et Zembretta
	● 4. Djurdjura		● 13. Jabal Al Rihane	Tunisia	● 23. Djebel Bou-Hedma
	● 5. Chrea		● 14. Shouf		● 24. Ichkeul
	● 6. Taza	Morocco	● 15. Oasis du Sud Marocain		● 25. Djebel Chambi
	● 7. Gouraya		● 16. Arganeraie		● 26. Socotra Archipelago
Egypt	● 8. Omayed	Qatar	● 17. Intercontinental BR of Mediterranean	Yemen	● 27. Bura'a
	● 9. Wadi Allaqi		● 18. Al Reem		

Management Effectiveness of BRs within ArabMAB

COUNTRY	Number of BRs assessed
Algeria	6
Egypt	2
Jordan	2
Lebanon	3
Sudan	1
Tunisia	4
UAE	1
Yemen	2
Morocco	1
Total	22

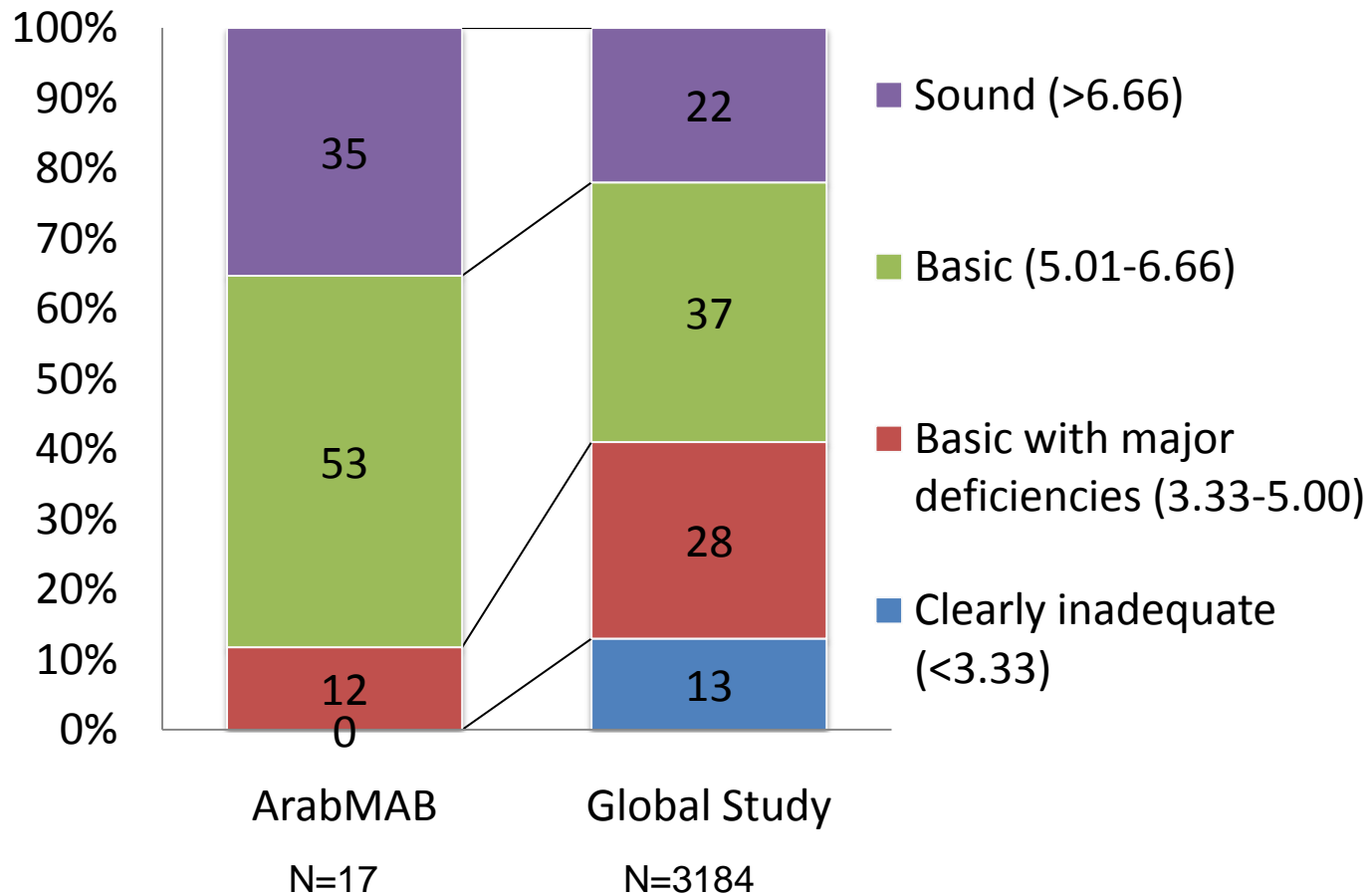
Assessment conducted	n	%
Yes	17	77
No*	5	23
TOTAL	22	100

* 5 respondents had “no operational management” in place

Governance type	n	%
Government institution	15	68
NGO	4	18
Co-management	2	9
No management yet	1	5
TOTAL	22	100

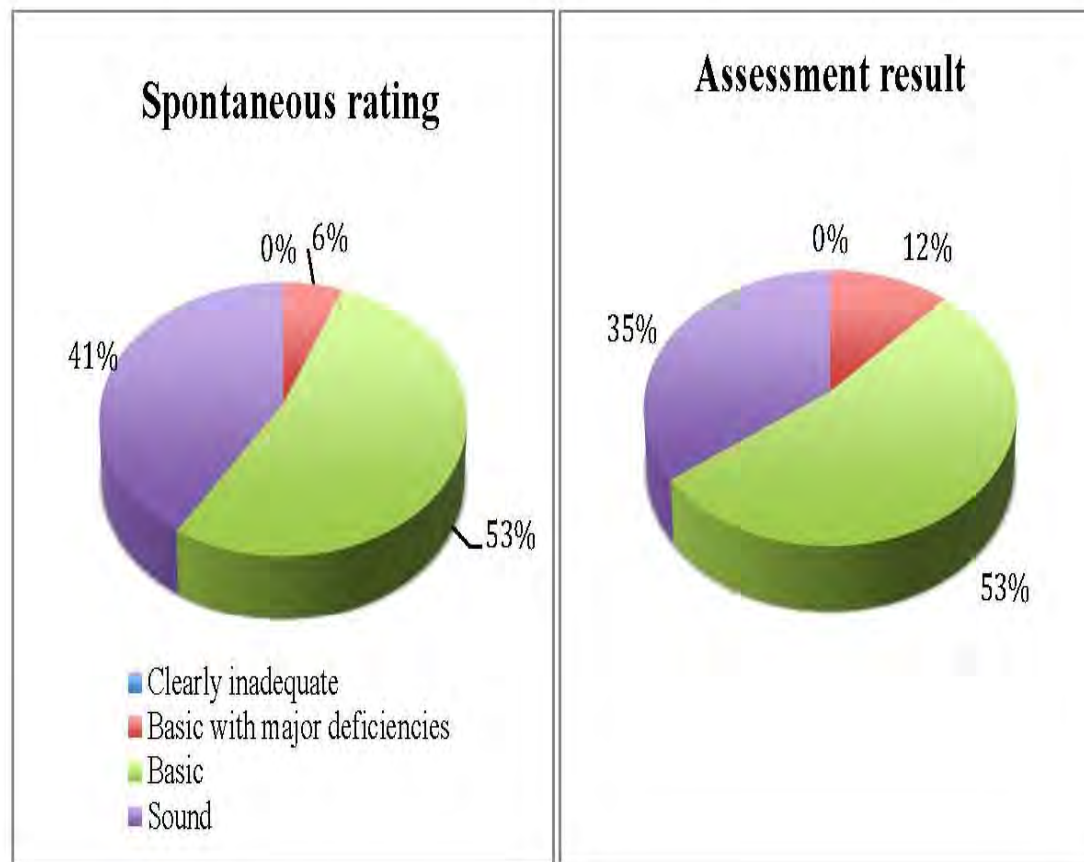
Management Effectiveness of BRs within ArabMAB

NO ARAB BR'S (0%) SCORED IN "CLEARLY INADEQUATE" COMPARED TO 13% FOR GLOBAL PA'S



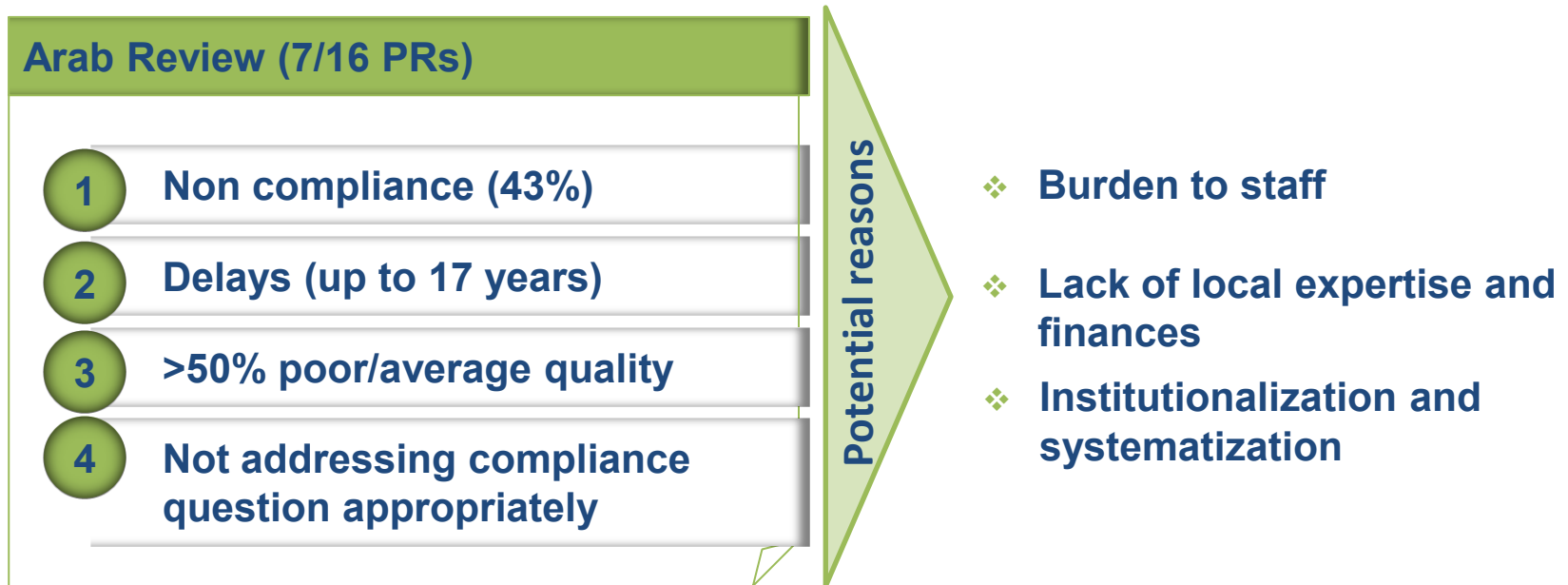
Management Effectiveness of BRs within ArabMAB

SPONTANEOUS RATING OF BR MANAGEMENT BY 17 RESPONDENTS: A MAJORITY OF RESPONDENTS ACCURATELY ESTIMATED THEIR PERFORMANCE



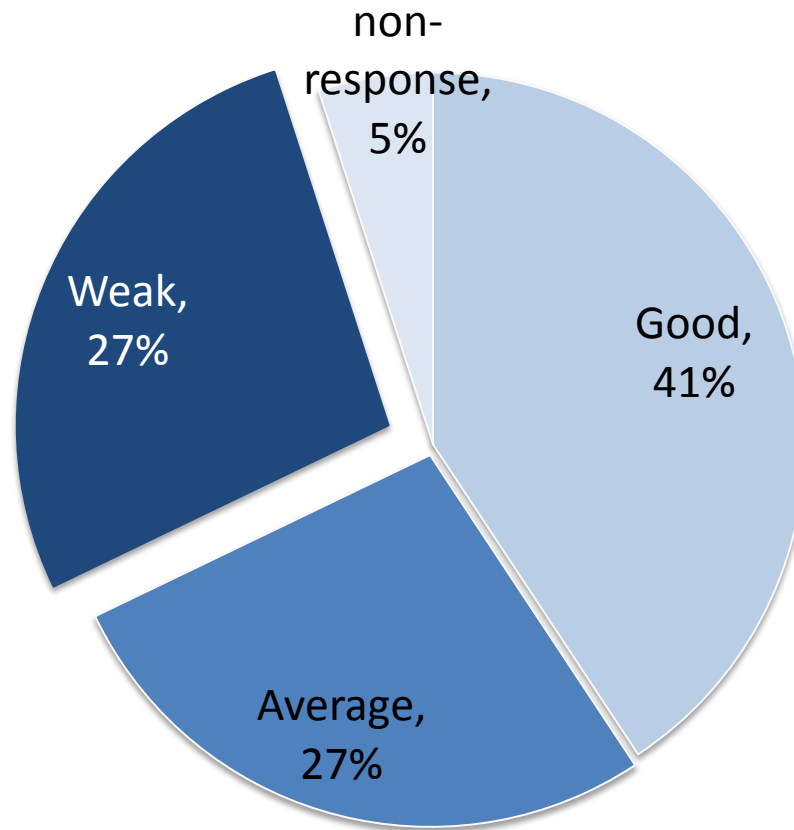
Management Effectiveness of BRs within ArabMAB

The Periodic Review of BRs in ArabMAB presents many gaps similarly to the global PR situation



Management Effectiveness of BRs within ArabMAB

MOST BR'S RATE THEIR COMMUNICATION WITH MAB INSTITUTIONS AS WEAK TO AVERAGE



Management Effectiveness of BRs within ArabMAB

IDENTIFIED CHALLENGES OF ARAB MAB MANAGEMENT

- CONSTRAINTS IN FUNDING, STAFF, INFRASTRUCTURE/EQUIPMENT, AND INFORMATION
- LEGISLATION AND POLICY FRAMEWORK
- ADEQUACY OF LAW ENFORCEMENT CAPACITY
- INVOLVEMENT AND SUPPORT OF LOCAL COMMUNITIES

Management Effectiveness of BRs within ArabMAB

MORE CHALLENGES IDENTIFIED THROUGH IN-DEPTH INTERVIEWS

- INAPPROPRIATE ZONING SINCE NOMINATION PHASE
- POOR VISIBILITY AND BRANDING OF MAB/BR
- ILLEGAL AND DESTRUCTIVE PRACTICES DUE TO TURMOIL
- DISENGAGED MAB FOCAL POINTS

Management Effectiveness of BRs within ArabMAB

Seven Priority Areas for Improvement ¹	Lima Action Plan: Corresponding Action ³
1- Communication, collaboration and cooperation	A1.3; B2; D1; D2
2- ArabMAB institutional gaps	E2; E4; E5
3- Understanding and differentiation of the BR concept	C7
4- Integration and mainstreaming of the MAB program	A2; D3
5- Involvement and participation of local communities	A 1.1; A 1.2; A 5.2
6- Evaluation of biosphere reserve management	A 5.1
7- Capacity and resources (cross-functional)	B 1.1; B 1.2 (capacity) A4; E1.2 (resources)

Management Effectiveness of BRs within ArabMAB

Seven Priority Areas for Improvement

1- COMMUNICATION, COLLABORATION AND COOPERATION

- GLOBAL ISSUE OF THE MAB PROGRAM
- COMMUNICATION BREAKDOWNS - BR MANAGERS WITH:
 - ✓ GOVERNMENT AGENCIES
 - ✓ ArabMAB FOCAL POINTS
 - ✓ REGIONAL AND INT'L MAB
- COOPERATION WITH OTHER BR'S AND REGIONAL NETWORKS
- TWINNING, PARTNERSHIP OPPORTUNITIES



Management Effectiveness of BRs within ArabMAB

Seven Priority Areas for Improvement

2- ArabMAB INSTITUTIONAL GAPS

- PERCEIVED AS NON-COHESIVE, WEAK LINKAGES
- RE-EVALUATE “WHAT IS WORKING” VS “WHAT IS NOT WORKING”
- RE-DESIGN POLICIES, UPDATE BY-LAWS
- CAPACITY BUILDING AND RESPONSIBILITY REVIEW

Management Effectiveness of BRs within ArabMAB

Seven Priority Areas for Improvement

3- UNDERSTANDING AND DIFFERENTIATION OF BR CONCEPT

- DIFFERENTIATE FROM PA'S
- INCREASE AWARENESS, STRENGTHEN "BRAND"

4- INTEGRATION AND MAINSTREAMING OF BR CONCEPT

- ALIGN WITH OTHER NATIONAL CONSERVATION AND SUSTAINABLE DEVELOPMENT PROGRAMS
- INTEGRATE IN NATIONAL LEGISLATIVE FRAMEWORK
- ALIGN ROLES OF MULTI-GOVERNANCE INSTITUTIONS (MINISTRIES)

Management Effectiveness of BRs within ArabMAB

Seven Priority Areas for Improvement

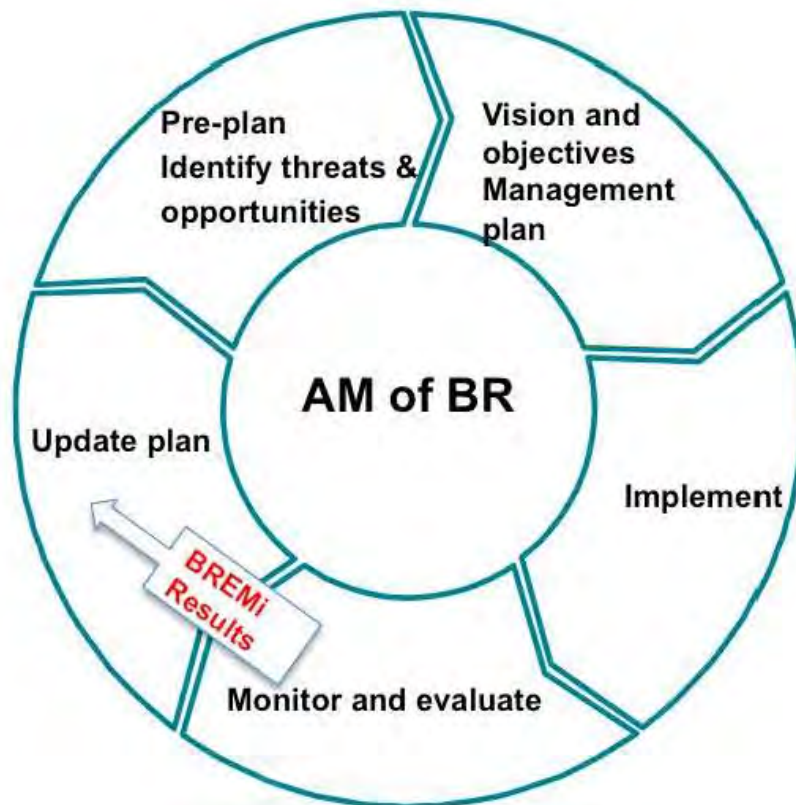
5- INVOLVEMENT AND PARTICIPATION OF LOCAL COMMUNITIES

- LACK OF PARTICIPATION IN DECISION-MAKING
- LACK OF SUPPORT AND OWNERSHIP
- MOVE AWAY FROM CENTRALIZED APPROACH TO INCLUSIVE NETWORKS WITH COMMUNITY, RESEARCHERS, LOCAL LEADERSHIP

Management Effectiveness of BRs within ArabMAB

Seven Priority Areas for Improvement

6- IMPROVE EVALUATION OF BR MANAGEMENT



AM= Adaptive Management

The research provides the first tool to evaluate management effectiveness of BRs:

The BR Evaluation of Management indicators framework

BREMi = 34 Indicators

Management Effectiveness of BRs within ArabMAB

Seven Priority Areas for Improvement

7- CAPACITY AND RESOURCES

- ADEQUACY OF STAFF SKILLS AND NUMBER
- INFRASTRUCTURE, FACILITIES, EQUIPMENT
- SECURITY AND RELIABILITY OF FUNDING

BACK-UP CHART

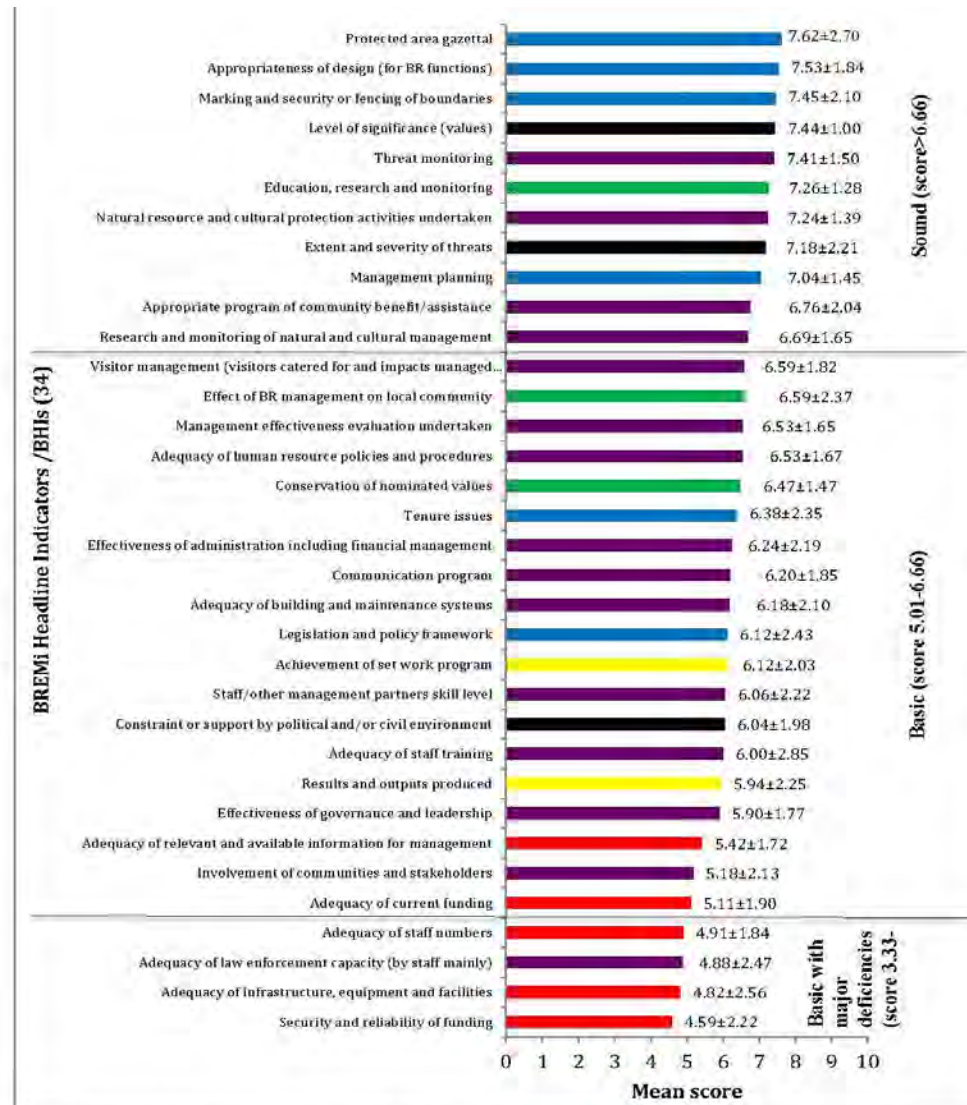


Fig. 19: Mean scores for BREMi Headline Indicators (BHI) in descending order (N=17)
 Note: Colors used to indicate the element of the WCPA Framework include black for "context" factors, aqua for "planning", red for "input", purple for "process", yellow for "outputs", and green for "outcomes"

REFERENCES

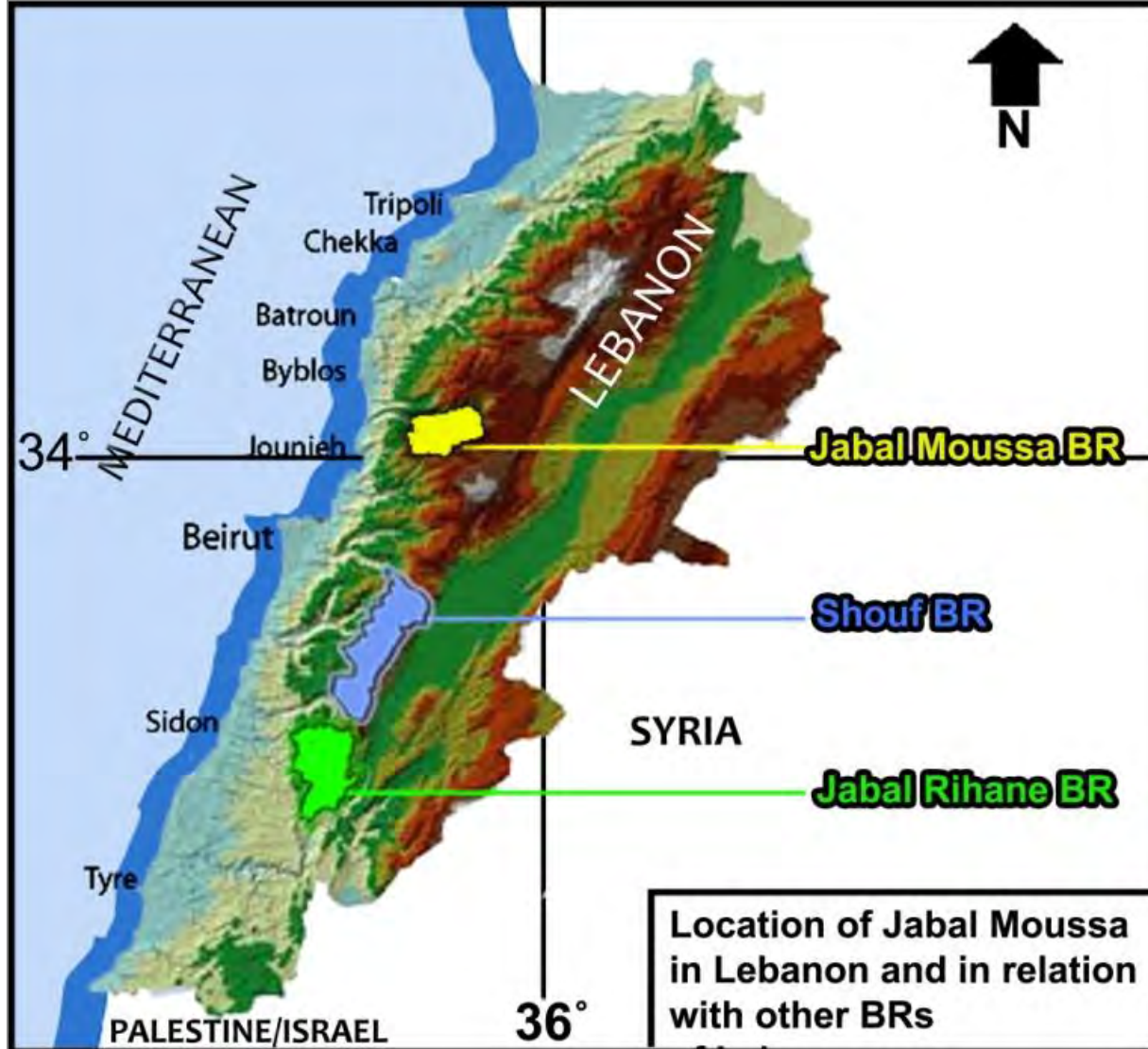
1. Matar, Diane A. 2015. *Status of concept implementation and management effectiveness of Biosphere Reserves in the Arab region*. Doctoral dissertation, Department of Environmental Sciences and Policy, Central European University, Budapest.

Contact: matar.adiane@gmail.com

2. Leverington, F., Costa, K.L., Pavese, H., Lisle, A., and Hockings, M. 2010b. A global analysis of protected area management effectiveness. *Environmental Management* 46: 685-698.

3. UNESCO. 2016. Draft Lima Action Plan.

4th World Congress of Biosphere Reserves



4th World Congress of Biosphere Reserves

Surface of core area: **13 km²** - Total area: **65 Km²**

Altitudes: **350m - 1700m**

Bioclimatic ranges: **eu-med, supra-med, mountainous med**



Oliver Opil

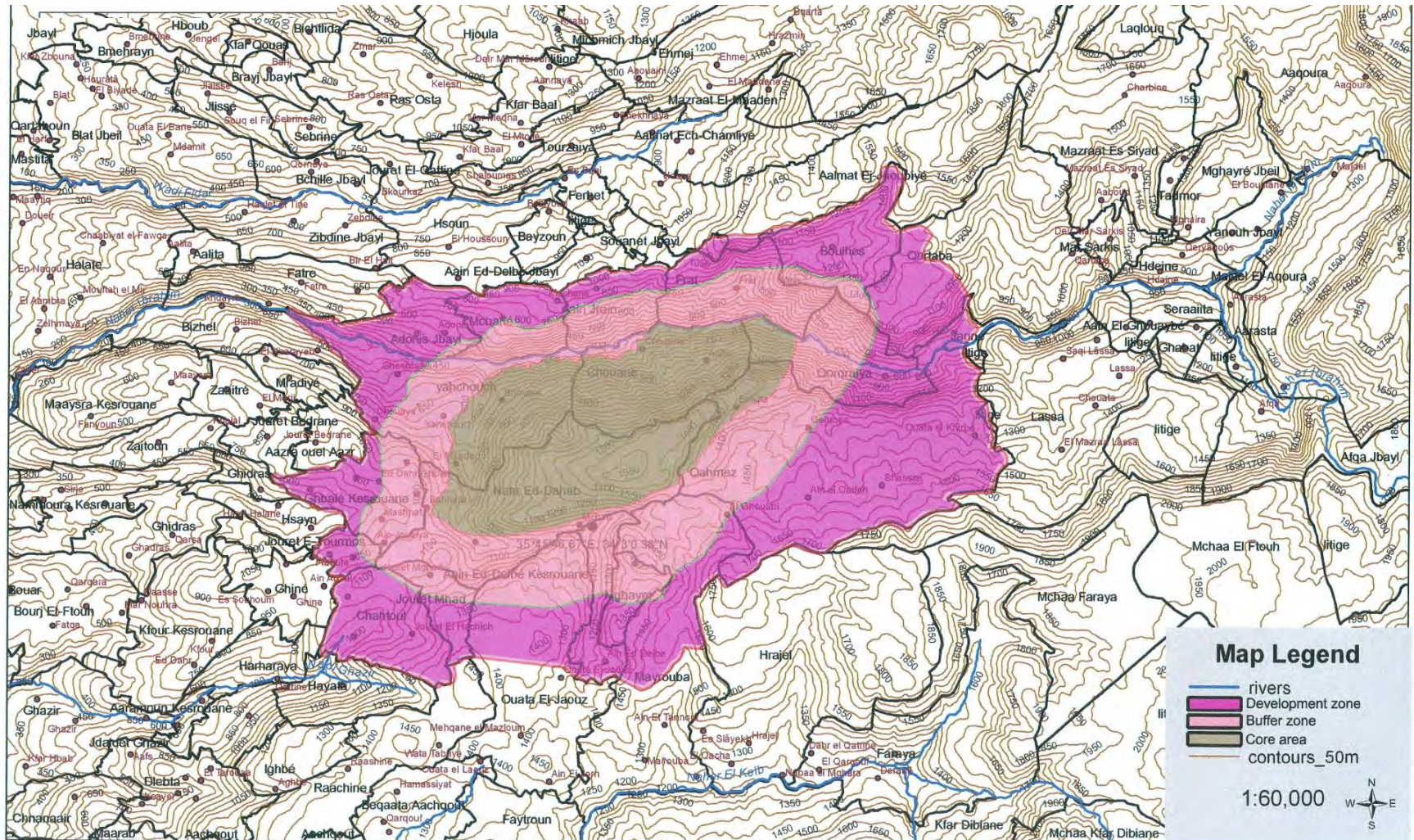


4th World Congress of Biosphere Reserves

May 2009 - UNESCO Biosphere Reserve under the MAN AND BIOSPHERE Program (**MAB**)



4th World Congress of Biosphere Reserves



Jabal Moussa hosts...

727 flora species,

20 mammal species,

163 bird species...



4th World Congress of Biosphere Reserves

26 endemic species to Lebanon



4th World Congress of Biosphere Reserves

6 endemic species to Jabal Moussa Biosphere Reserve



4th World Congress of Biosphere Reserves

F a u n a



4th World Congress of Biosphere Reserves

Adonis River



MAJOR CHALLENGES: LEBANON

- **SMALL / "INFLUENT REGIONAL ACTOR"**
- **RICH BIODIVERSITY BUT GREEN COVER DOWN TO 13%
(FRIGHTFUL DESTRUCTION OF ECOSYSTEMS)**
- **INDIVIDUALS THRIVE /GROUPS OFTEN FALTER**
 - **INDIVIDUALLY: "STRONG HUMAN CAPITAL" + HIGH EDUCATION**
 - **INSTITUTIONALLY: WIDE-SPREAD DYSFUNCTIONALITY**



CHALLENGES: IN CONSERVATION MANAGEMENT WORLDWIDE

1. GLOBAL - “BUREAUCRATIC”

(IUCN/MAB/IBA)

2. GOVERNMENT

(AUTOCRATIC)

3. HIGH INCOME “CONCEPTS”

(MITIGATING GLOBAL WARMING)

LOCAL - “CHAOTIC”

(COMMUNITY)

GOVERNANCE

(PARTICIPATIVE)

LOWER INCOME “REALITY”

(MITIGATING ILLEGAL ACTIVITIES
RESULTING FROM POVERTY AND
POOR ENFORCEMENT)

MAJOR ISSUE:

AVOIDING

- “PAPER PARKS”

- “PAPER NGO’S”

(DEGRADATION)

(INEFFECTIVENESS)



LOCAL SOLUTIONS

1. **“CENTRAL TO OUR CONSERVATION EFFORTS IS THE NECESSITY TO WORK CLOSELY, IN AN ATMOSPHERE OF MUTUAL TRUST, WITH THE LOCAL COMMUNITY”.**
2. **“RESPECT FOR RURAL COMMUNITIES’ ACCUMULATED WISDOM”.**
3. **SUCH AN APPROACH WILL HELP ENSURE THAT OUR BIOSPHERE RESERVE - AND ITS LOCAL COMMUNITIES – ARE BETTER PLACED TO RESPOND TO EXTERNAL POLITICAL, ECONOMIC AND SOCIAL PRESSURES.**
4. **MANAGEMENT MUST BE OPEN, EVOLVING AND ADAPTIVE.**



LOCAL SOLUTIONS

FOLLOW BASIC PRINCIPLES OF SEVILLE STRATEGY:

- **BECOME THEATRES FOR RECONCILING PEOPLE AND NATURE, THEY CAN BRING KNOWLEDGE OF THE PAST TO THE NEEDS OF THE FUTURE, THEY CAN DEMONSTRATE HOW TO OVERCOME THE PROBLEMS OF THE SECTORAL NATURE OF OUR INSTITUTIONS.**
- **COMMUNITIES OBTAIN COLLECTIVE RESPONSIBILITY FOR THEIR OWN FUTURE AND BECOME MANAGERS OF THEIR OWN DEVELOPMENT IN AN IDEAL CASE OF SOCIO-ECONOMIC EMPOWERMENT.**



LOCAL SOLUTIONS

Rallying – Protecting Adonis Valley



LOCAL SOLUTIONS

صنع يُعِين...
Food and Handicraft products



LOCAL SOLUTIONS

Food and Handicraft products ... صنع أيدينا ...



LOCAL SOLUTIONS

Ecotourism



LOCAL SOLUTIONS

Ecotourism - Roman stairs



LOCAL SOLUTIONS

Ecotourism - Hadrian's Inscriptions



LOCAL SOLUTIONS

Ecotourism - Old Houses and Cisterns



LOCAL SOLUTIONS

Ecotourism - Abandoned Ottoman Village



LOCAL SOLUTIONS

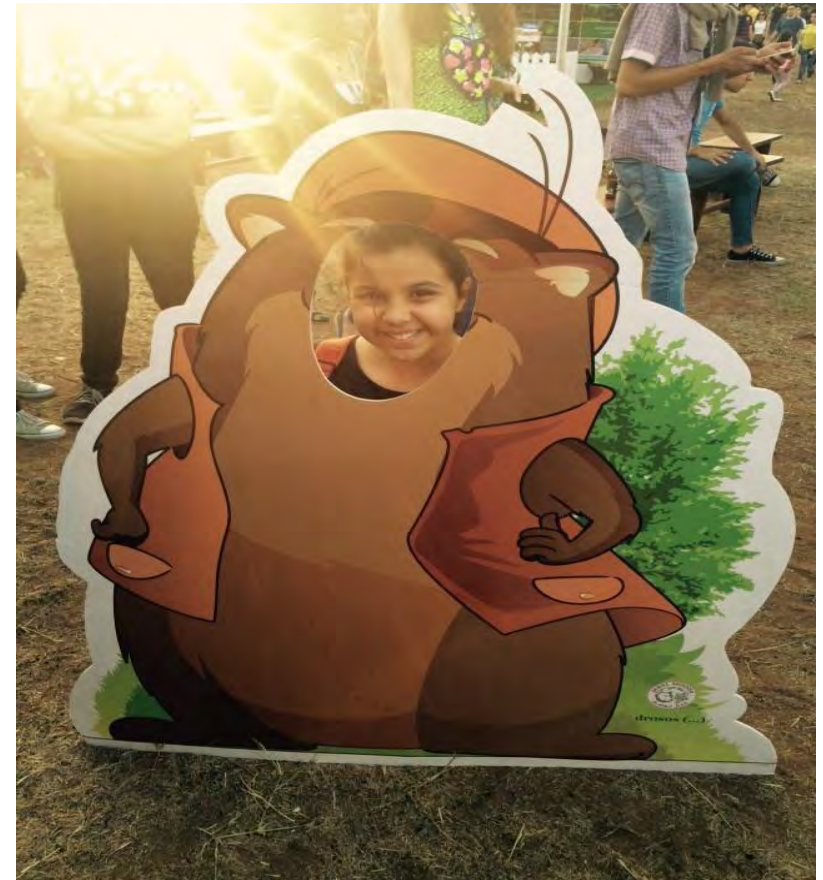
Raising Awareness



Northernmost limit of rock hyrax

LOCAL SOLUTIONS

Raising Awareness



BRIDGING THE GAP

LOCALLY:

FEDERATE STRENGTHS

- PARTICIPATIVE
- ADAPTIVE

GLOBALLY (MAB):

CLOSE GAPS:

- KNOWLEDGE
- FUNDRAISING
- TWINNING + NETWORKING

ROLE OF ArabMAB



BRIDGING THE GAP

“HELICOPTER PERSPECTIVE”

- PARTICIPATIVE + ADAPTIVE
(COMMUNITY)

- WORLD CLASS
PROFESSIONALISM
(TRAINING, TWINNING,
FUNDRAISING)

= UNBEATABLE



“Nature is not a place to visit. It is home.”

Gary Snyder



Thank **You!**



www.jabalmoussa.org