

Experience of Benchmarking at Eduardo Mondlane University

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- **2017: African Quality Rating Mechanism (AQRM)** (not classifying but having a portrait of quality)
 - ✓ survey/evidence 6 areas: **governance&management; infrastructure; finance; teaching&learning; research, publications and innovation; community engagement;**
- **Benchmarking:** WB's excellence initiative, in partnership with PASET, aiming to strengthen STEM Fields in Africa.
 - ✓ Assess the performance against pre-established evidence and metrics;
 - ✓ support HEIs in data collection and analysis;



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AQRM Main findings

Major Standard	Aggregated Value
Governance and Management	2.94 (4)
Infrastructure	2.93 (4)
Finance	2.94 (4)
Teaching and Learning	2.67 (4)
Research, Publication and Innovation	2.25 (4)
Societal Engagement	2.14 (4)
Total Aggregated Value	15:6=2.5 (Satisfactory)
QUALITY RATING	
POOR Quality	1.0
INSUFFICIENT Quality	1.0 and 1.99
SATISFACTORY Quality	2.63
GOOD Quality	2.8 and 3.5
EXCELLENT Quality	More than 3.5

Some examples of Weaknesses

- **Research, Publication and Innovation**
 - ◆ Few publication and quasi no patents;
 - ◆ Weak capacity for fundraising and participation in competitive international research competitions
- **Social and Community engagement:**
 - ◆ Weak social relevance of university

- **PASET-Benchmarking Methodology assesses :**
 - **Institutional Performance**
 - **Institutional Health**



Indicators of institutional performance

Inclusion	Underrepresented groups (no data on students' socioeconomic background)
Learning outcomes	<ul style="list-style-type: none">• % of graduates who are successful in exams for professional integration (no data)• Level of student satisfaction
Integration into the labour market	<ul style="list-style-type: none">• % of graduates who were employed in the first 6 months after graduation (no data)
Research outputs	<ul style="list-style-type: none">• No. of scientific articles indexed in WOS (few articles)• % of highly cited articles (few)• % of graduates with PhD and Master's degrees (few PhD)• Position in the Shanghai ranking (not ranked)
Knowledge	<ul style="list-style-type: none">• Number of patents registered (few to 0)• Number of incubator companies (no data)



Indicators of Institutional Health

Inclusion and equity	<ul style="list-style-type: none">• Share of underrepresented groups (Female, SSN, Low income) (more than 30% female; scholarships and ramps to SSN)
Quality of Teaching and Learning	<ul style="list-style-type: none">• Use of innovative teaching practices• proportion of teachers with pedagogical training (full-time staff)• Pass and dropout rates in the first and last years• % of accredited academic programs (accredited programs)• Existence of an internal quality assurance system
Relevance	<ul style="list-style-type: none">• Proportion of students doing internships (no data)• participation of employers in curriculum design (no data)• proportion of full-time staff who are professionals (practitioners).
Internationalization	<ul style="list-style-type: none">• proportion of foreign students and teachers (few)• percentage of joint publications with foreigners (high).
Research	<ul style="list-style-type: none">• proportion of postgraduate students (few)• proportion of academic staff with a doctorate (few)• proportion of academics who publish at least 1 article per year (few)



Indicators for Institutional Health

Community engagement and knowledge transfer (**no data**)

- % of staff involved in technology transfer activities
- Existence of an incubator at the university
- % of budget spent on technology transfer activities
- % students participating in community service

Governance and Management

- Degree of institutional autonomy;
- Mechanism for selecting leadership;
- number of days classes were not held due to strikes, etc.

Finance

- Distribution of expenses by category;
- Unit cost per student;
- Distribution of the budget by source.

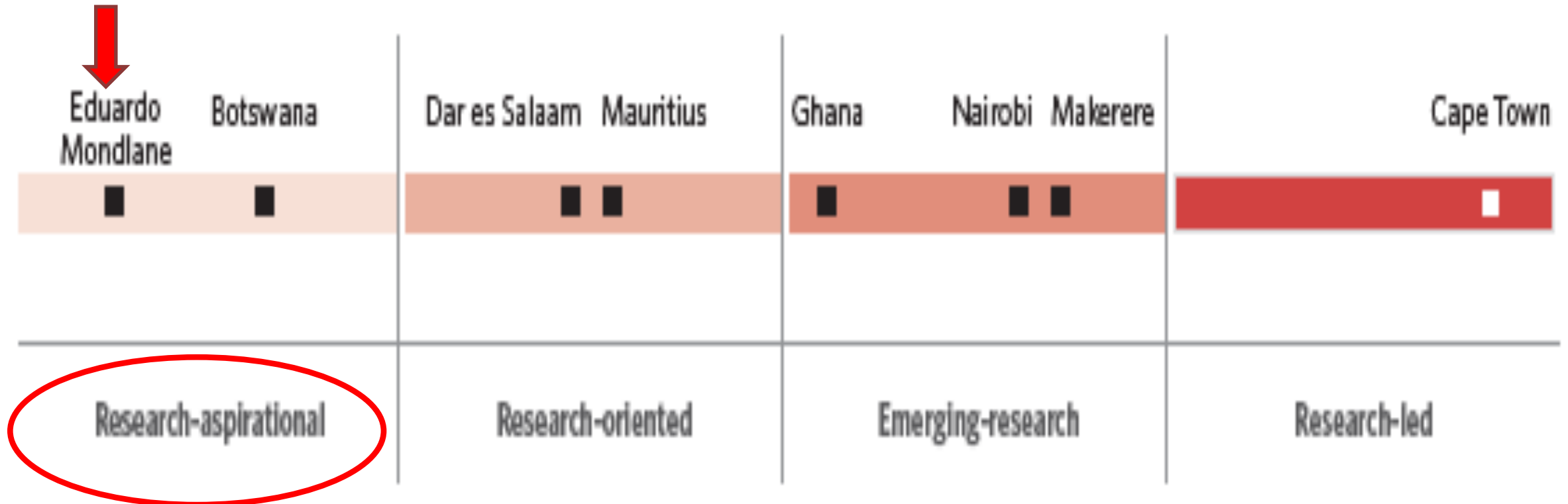
Performance indicators at UEM

- ◆ No or few data: challenge for comparability among African institutions;
- ◆ However, the exercise was used to devise performance indicators for UEM, aiming at: **Linking planning, management and resource allocation processes to the achievement of relevant quality/performance indicators**

- **Good positioning at the national :**
 - ◆ Historical legacy
 - ◆ Around 40% of national scientific production
 - ◆ Concentration of the largest number of PhDs
 - ◆ Around 15 to 20% of the country's total student population
 - ◆ Several postgraduate academic programs
- **But there are challenges:**
 - ◆ % PhD (400/1800);
 - ◆ Research output (200/1800 per year);
 - ◆ Laboratories;
 - ◆ Financial resources

UEM as compared to Other Flagship Universities in Africa! (Cloete et al. 2018)

Figure 2.7 Categorisation of eight universities by research activity



Research-aspirational University Meaning?

- **It is the one that, in its mission, vision and strategic plan, expresses a commitment to research**

But which,

- **Does not meet the main indicators (inputs, outputs) of a research university** (Cloete, 2018, p.74)

Examples of some indicators used in HERANA (CHET) project (Cloete et al. 2018)

% staff with PhD

	2010	2013	2015	Herana target
Botswana	65%	60%	58%	60%
Cape Town	61%	65%	60%	
Dar es Salaam	48%	49%	48%	
Eduardo Mondlane	19%	20%	19%	
Ghana	62%	62%	59%	
Makerere	33%	33%	43%	
Mauritius	45%	46%	50%	
Nairobi*	26%	25%	25%	

Number of Indexed publications by *Web of Science*

	2010	2013	2015	Changes: 2015 compared to 2010	
Botswana	141	142	192	51	36%
Cape Town	1 728	2 056	2 582	854	49%
Dar es Salaam	98	86	127	29	30%
Eduardo Mondlane	55	55	80	25	45%
Ghana	199	199	312	113	57%
Makerere	429	470	613	184	43%
Mauritius	48	66	74	26	54%
Nairobi	219	266	319	100	46%



- ***We need a management strategy based on quality/performance indicators***
- ***Evaluation is not enough! We need to act and use the information generated by the evaluation for planning, management and decision-making in order to achieve the key indicators.***

Suggested Indicators

Total: 30

- ◆ Teaching: 6
- ◆ Research: 12
- ◆ Extension: 9
- ◆ Governance: 3+2

Selection criteria

- ◆ Relevance
- ◆ Agregation
- ◆ Mensurability
- ◆ Ease of obtaining data



Indicators : Teaching

	Weight
2.1. % of academic Staff with PhD (N. full-time staff with PhD/ total number of Staff at the Faculty)	2
2.2. % of academic staff in training for PhD (N. full-time staff in training for PhD/ total number of Staff at the Faculty)	2
2.3. Graduation rate last 3 Years (undergraduate) (N. graduates /N. of enrolled students per cohort)	1
2.4. Graduation rate last 3 Years (Post-graduate) (N. graduates /N. of enrolled students per cohort)	1
2.5. % evaluated undergraduate and graduate academic programs (N. of programs self-assessed/ total number of programs)	1
2.6. % undergraduate and graduate academic programs submitted to external evaluation (CNAQ) (N. of programs submitted/ total number of programs)	1

Thank You!
Muito obrigado