



TUNING AFRICA

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The Need to Enhance the Employability Skills of Undergraduates in Agriculture. Evidence from Students' Perceptions and Employers' Expectations

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OUTLINE OF PRESENTATION

- Introduction
- Research Problem
- The Context
- Aim and Objectives of Study
- Review of Literature: salient points
- Methodology
- Results
- Conclusions and Recommendations



INTRODUCTION (1 / 2)

- Some observable trends in the global workplace
 - Increasing globalised competition for jobs and promotion of lifelong learning opportunities
 - Leads to students having to show better employability skills
 - Increasing mobility of students across the world
 - Leads to HEIs having to be more competitive to attract students



INTRODUCTION (2 / 2)

- Tertiary education contributes to the social and economic development of a country
- How? (OECD, 2008)
 - Value-addition to human capital through teaching
 - Use of research and knowledge creation to build knowledge bases
 - Fostering interactions with knowledge users to disseminate and use knowledge
 - Maintenance of knowledge through inter-generational storage and the transmission of knowledge thereon



RESEARCH PROBLEM

□ How can Higher Education Institutions prepare graduates for the world of work?



□ Triggers

- Perceived mismatch between employers' expectations and graduates' skills and competencies
- Unemployment rate of graduates
- Long delays between end of graduation and first job



THE CONTEXT (1/ 6)

- ❑ A case study of the Faculty of Agriculture (FoA) of the University of Mauritius was taken to find answers to the research problem
- ❑ Mauritius is a Small Island Developing State (SIDS) located in the Indian Ocean, East of Madagascar
- ❑ Population of around 1.2 million inhabitants in December 2015
- ❑ Unemployment rate of 7.8% in 2015, that is, about 16280 inhabitants were unemployed out of which around 9000 were university graduates (Statistics Mauritius, 2015)



THE CONTEXT (2/ 6)

- In order to decrease this unemployment rate, the Mauritian government has adopted the following measures
 - The “YEP project” (Youth Employment Program): in 2013, about 4000 youths were attributed a job
 - The "Service-focused employment preparation": to improve the "soft skills" of unemployed youth
 - The “Graduate Training Employment Scheme” (GTES): aims at partnering with the private sector for a more targeted training of the graduate coupled with industrial placement and mentoring



THE CONTEXT (3/ 6)

- ❑ The Mauritian Agricultural sector represents 19% of employment of the population
- ❑ The other sectors of employment include the EPZ sector (33.9%), the manufacturing sector (12.6%), the tourism industry (16.5%) and the financial services (8.3%)
- ❑ At the end of 2013, 42,000 Mauritian students were enrolled in a study programme at tertiary level, out of which 55% were female students



THE CONTEXT (4/ 6)

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THE CONTEXT (5/ 6)

DISTRIBUTION (%) OF GRADUATES REGISTERED ON *GTES

		Percentage
1.	Social Sciences, Business and Law	54.9
2.	Sciences	11.9
3.	Education	8.0
4.	Engineering, Manufacturing and Construction	7.5
5.	Humanities and Art	5.4
6.	Services	5.2
7.	Health and Welfare	4.8
8.	Agriculture	0.9
9.	Others	1.4

* GTES - Graduate Training Employment Scheme



THE CONTEXT (6/ 6)

- Students' enrolment in the field of agriculture is low
- It has been on a constant decline over the years with an increasing preference for social sciences, business and law
- However, the introduction of new schemes in support of Bio Farming, food processing and value-addition will attract new entrepreneurs to agriculture
- This transformation in the agriculture sector will create new job opportunities, but..
- Has to leverage on skilled human capital



OBJECTIVES OF STUDY

- To identify the perceptions of employers, alumni and students of the FoA, concerning the skills, understandings and personal attributes, which enhance the employability of undergraduates in agriculture
- To analyse the gaps in perceptions of professional competencies between key stakeholders
- To assess how FoA can use the perceptions to provide formal learning opportunities to enhance employability skills of FoA students



REVIEW OF LITERATURE – SALIENT POINTS (1/ 3)

- Hillage and Pollard (1998) define employability as the capacity of an individual to first secure initial employment, to be able to keep this employment, and to be eventually able to obtain another employment if required. Each individual has employable assets namely knowledge, skills and attitudes
- According to the National Institute of Adult Continuing Education (NIACE), emphasis should not be laid on the responsibility of the individual to be 'employable'



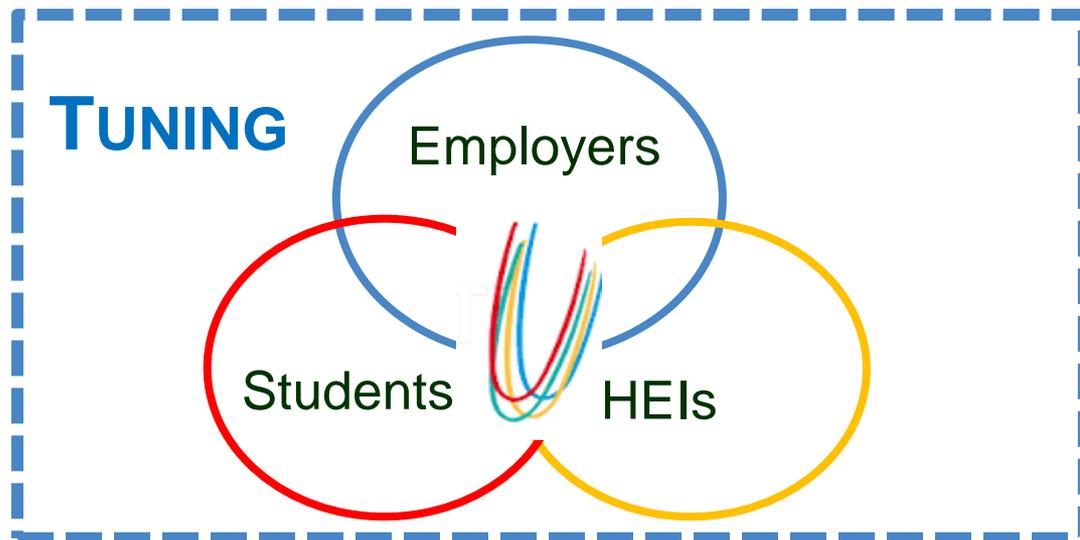
REVIEW OF LITERATURE – SALIENT POINTS (2/ 3)

- Employability is a shared ‘social construct’ between the individuals who have to be responsible for their choices and decisions made and the enterprises who have to provide the adequate work environment and culture (including values, attitudes and behaviours) to promote the employability of their workforce
- CBI/Pearson in 2012 surveyed the needs of UK employers from education and skills, and reported a number of shortcomings identified by the employers such as poor team working; limited career awareness, poor business and customer awareness



REVIEW OF LITERATURE – SALIENT POINTS (3/ 3)

- It was put forward by the authors of the above report that the shortcomings identified in terms of employability skills can best be overcome through a partnership approach involving the students, the HEIs and the employers
- TUNING approach





METHODOLOGY

- A series of four quantitative surveys were conducted over the period November 2015 to February 2016 to gather primary data from different sources namely
 - Current students of FoA (n=60)
 - Alumni of FoA (n= 25)
 - Employers (n= 15)
 - Technical staff employed in the Faculty of Agriculture laboratories(n=17)



RESULTS (1/ 4)

PERCENTAGE OF CURRENT *FoA STUDENTS WHO AGREE THAT THEY HAVE ACHIEVED EMPLOYABILITY SKILLS

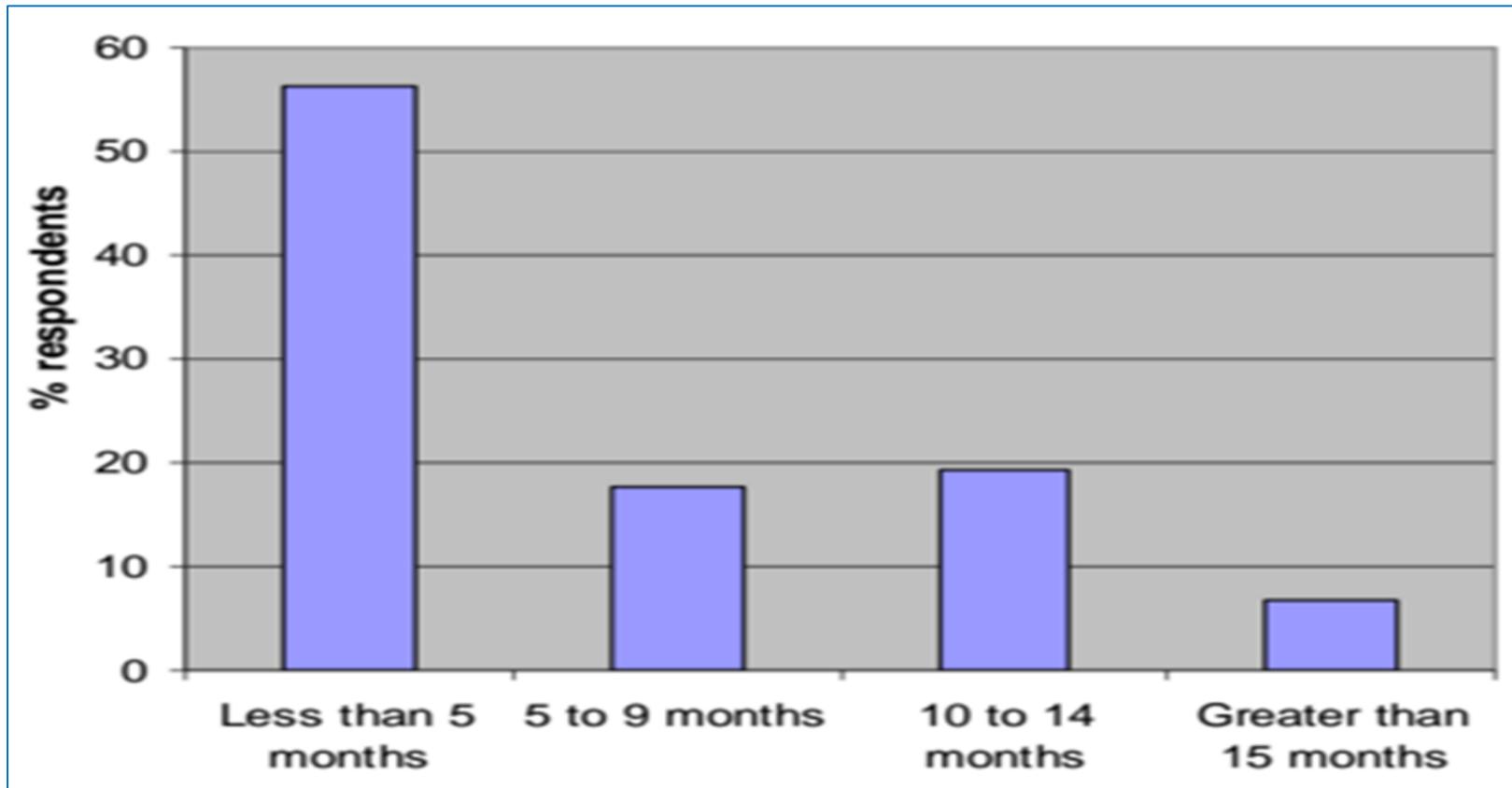
Employability skills	Percentage
Teamwork	61.7
Communication	63.3
Writing and Reporting	46.7
Statistical analysis	46.7
Awareness of modern technologies in agriculture	65.0
Management	60.0
Practical / Laboratory skills	64.0

* FoA – Faculty of Agriculture; University of Mauritius



RESULTS (2/ 4)

TIME LAG BETWEEN GRADUATION AND FIRST JOB

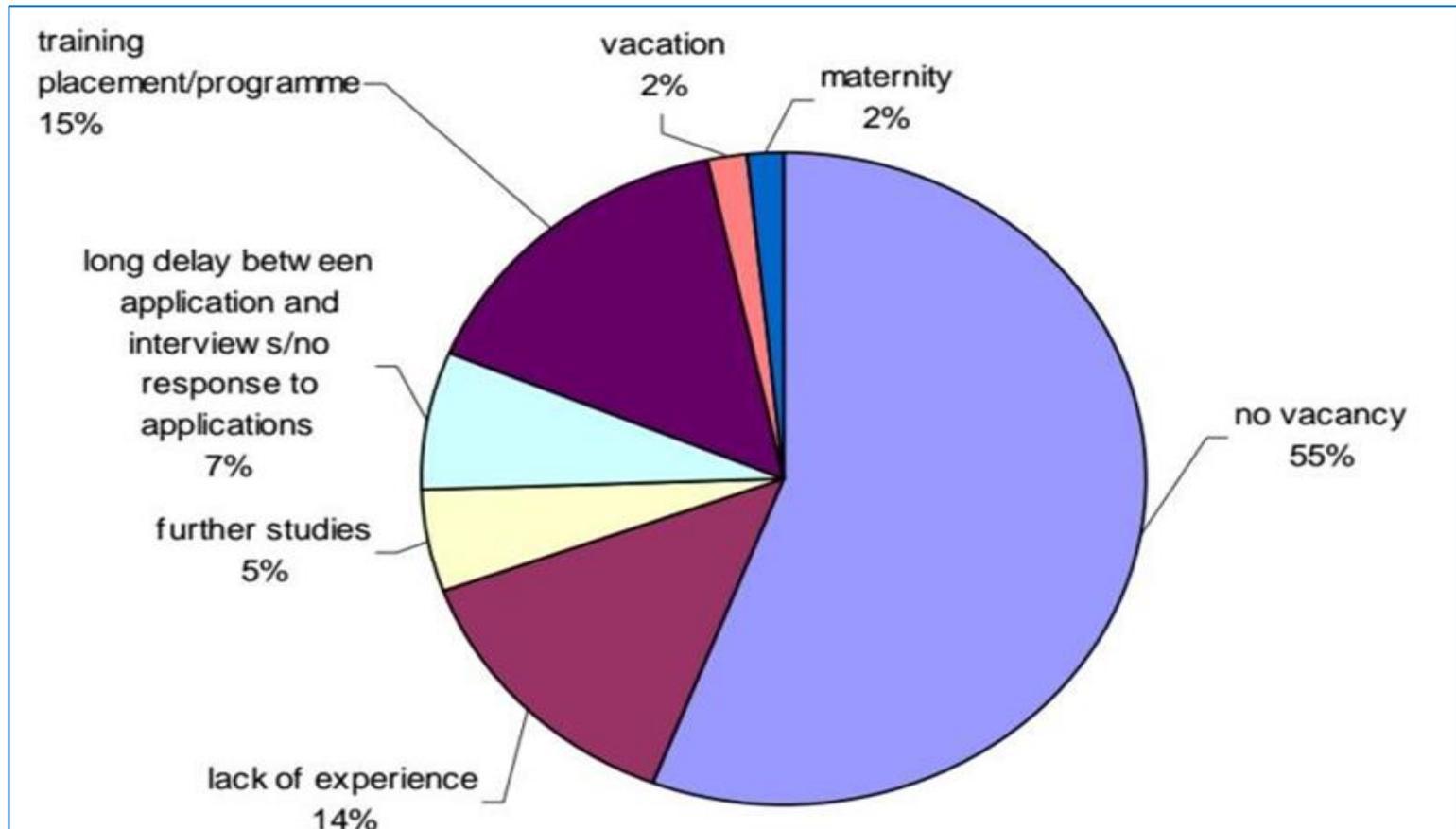


Source: FoA Tracer Study, 2010



RESULTS (3/ 4)

REASONS FOR TIME GAP BETWEEN GRADUATION AND FIRST JOB





RESULTS (4/ 4)

- Only one of ten employers were very satisfied with the FoA graduates employability skills
- About 50% of employers were dissatisfied with the team working skills of their workers
- About 60% of the employers were dissatisfied with the communication skills of their workers
- Only 11.1% of the technicians were satisfied with the technical skills acquired by the FoA students



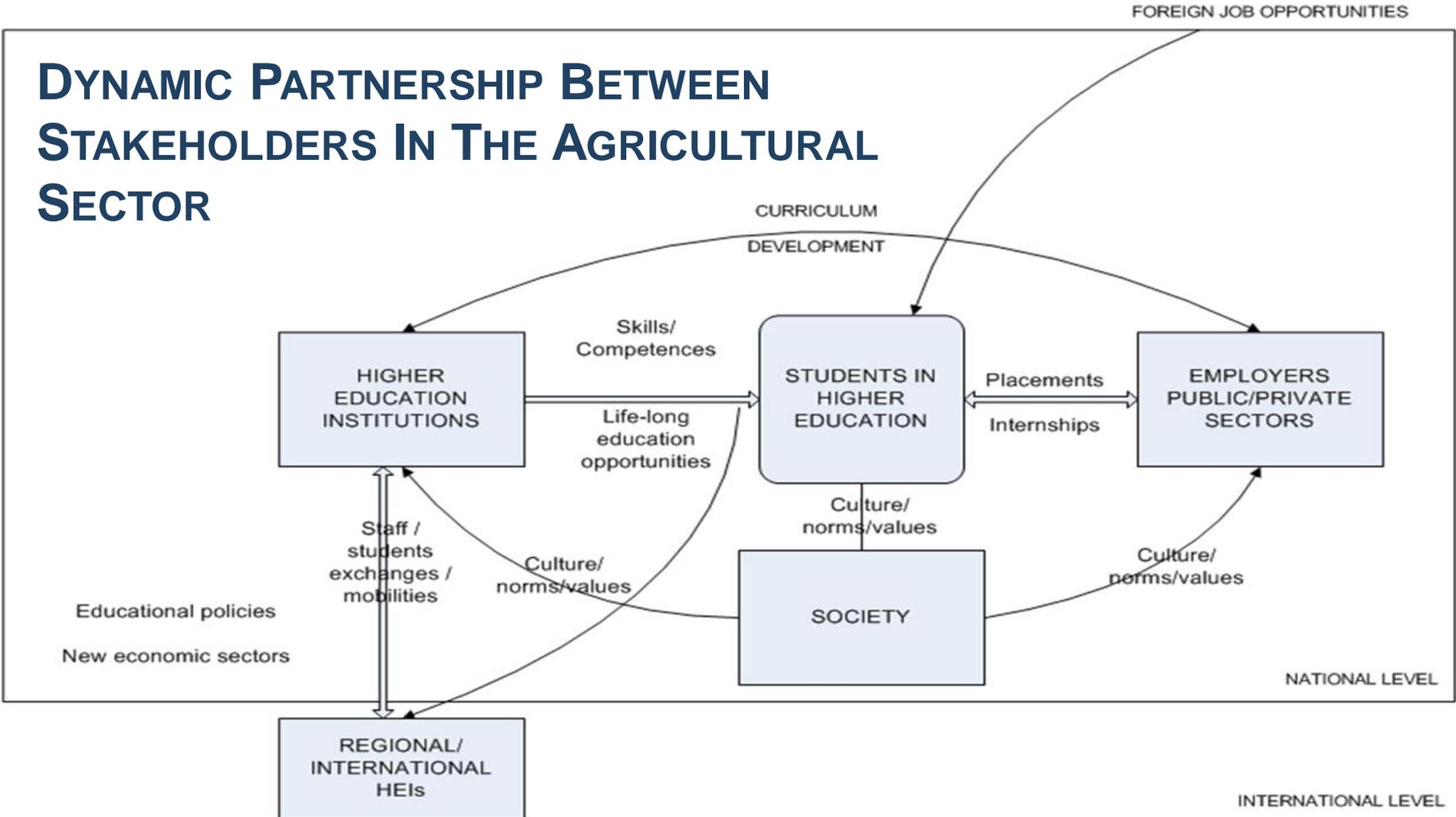
CONCLUSIONS AND RECOMMENDATIONS (1 / 4)

- According to this study, there seems to be a mismatch between what employers in the agricultural sector expect from their employees and what undergraduates from the FoA can provide in terms of skills / attributes
- Figure 1 proposes a model of the dynamic partnership that should exist between stakeholders in the higher education sector
- There should be a discussion with the different stakeholders of the sector, and create a new curriculum framework which reflects the needs of the job market



CONCLUSIONS AND RECOMMENDATIONS (2 / 4)

DYNAMIC PARTNERSHIP BETWEEN STAKEHOLDERS IN THE AGRICULTURAL SECTOR





CONCLUSIONS AND RECOMMENDATIONS (3 /4)

CURRICULUM MAPPING FOR BSc (HONS) AGRISCIENCE AND TECHNOLOGY

Graduates Attributes	Professional Competencies	A graduate of the course BA&T should be able to:
Communication/ Oral Skills	Exchange of information with colleagues; have appropriate inter-personal skills; facilitate conflicts; persuasively argue for the right of the worker	6.1 Communicate at an advanced level with individuals and groups and advocate for the improvement of graduate profile
Technical/ Laboratory skills	Apply the logical and rational behind the practical work; understand the chemistry behind the practical work, use modern apparatus for their practical work	7.1 to apply their theory in the technical work 7.2 Will be able to understand the chemistry behind all practical work 7.3 to find solutions to improve their laboratory skills
Writing skills/ Report skills	To write in scientific language and understand the plagiarism concept; the use of good referencing in reports, thesis; develop good practical reports and the good mounting up of thesis.	8.1 to write in a scientific way and to implement good referencing in reports, assignments and thesis 8.2 To write in a good scientific structured way



CONCLUSIONS AND RECOMMENDATIONS (4/ 4)

- Even though in some context, employability may not be a panacea for unemployment, in emerging economies like Mauritius, it is important to have a clear and harmonised tertiary education policy which englobes all stakeholders concerned



thank you!

Our sincere thanks to the Tuning Africa Academy for the opportunity given to present our research findings in front of peers having the same vision for Higher Education for the future