MUHIBILI UNIVERSITY OF HEALTH AND ALLIED SCIENCES

GUIDELINE FOR CONDUCTING TRACER STUDIES AT MUHAS

APRIL 2023

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ABBREVIATIONS

CC	Curriculum Committee
DQA	Director of Quality Assurance
ESS	Employer's Satisfaction Survey
GTS	Graduate Tracking System
HEIs	Higher Education Institutions
MUHAS	Muhimbili University of Health and Allied Sciences
QAU	Quality Assurance Unit
TCU	Tanzania Commission for Universities
VC	Vice Chancellor

PREFACE

A tracer study is an important quality assurance aspect that informs curricula reviews for quality improvement in university education. MUHAS has a key role to play in ensuring that the training offered enable students to adapt to rapidly changing labour market requirements and conditions. This can be achieved through many different ways including through tracer studies. This is especially because tracer studies provide information that is valuable for training institutions, graduates, students, professional councils and employers. Further, they help to inspire education, training and employment policies and curricula of education. They also act as guidance to help individuals decide on their education or training paths, and clearer judgements about skilling and re-skilling the labour force.

Tracer studies can be defined as retrospective analyses of graduates through a systematic survey, which takes place sometime after graduation preferably after completion of training cycle of Graduate Tracking System (GTS) normally takes place at least two years after graduation. Tracer studies involve not only graduates but also employers and other categories of end users of the graduates including professional councils. More concrete objectives of tracer studies include improving the education and training content and study conditions, improving the transition of graduates from education to the labour market, to better matching the supply of skills with the demand for them and establishing linkages with would be employers and employers.

As a premier provider of university education in the country, Muhimbili University of Health and Allied Sciences (MUHAS) is mandated to monitor and ensure quality, effectiveness and relevance of its programs in accordance to the TCU Guideline 2.4.1 of the Standards and Guidelines for University Education in Tanzania, 2019, which requires every university to conduct tracer studies periodically as part of quality assurance processes, results from which would feed into a programme review. However, in order to harmonize conduct of tracer studies at the University as directed by TCU through its Guideline 2.4.2 of the Standards and Guidelines requires the University to develop a guideline which will

facilitate departments/schools/Institutes in conducting tracer studies of their graduates as well as job market orientation for the programmes offered.

It is against the above background that MUHAS has developed a Guideline for conducting tracer studies in departments/schools/institutes which will serve as the minimum benchmarks for departments/schools/institutes when carrying out tracer studies of their graduates. These Guidelines are not intended to serve as "Standards" but rather as harmonization tools that will enable tracer study results be comparable and utilized effectively.

I am grateful to the Quality Assurance Unit at MUHAS for overseeing the development process of the Guideline from conception to completion stage of the assignment

Prof. Andrea B. Pembe   **Dar es Salaam, April, 2023**
 MUHAS Vice Chancellor

EXECUTIVE SUMMARY

Increasing demand for quality monitoring in higher education institutions (HEIs) appeals to the adoption of more systematic ways of handling quality issues. A tracer study which is sometimes also called Graduate Tracer Study (GTS) is one of the tools used to collect information about the relevancy of the education and training offered by HEIs.

A GTS is very important as it provides feedback which may also feed into curriculum development and review exercise. GTS surveys explore the position of graduates from HEIs or training centers which takes place sometime after graduation. It is carried out by the education institution to follow the graduates to know how well they meet market demands.

Common topics covered in GTS include questions on study progress, the transition to work, work entrance, job career, use of learned competencies, current occupation and job market orientation versus the programmes offered in universities.

Considering the importance of GTS in ensuring quality of university education at MUHAS, MUHAS has developed these Guideline in order to have standard and uniform pattern of conducting tracer studies in the departments/schools/Institutes.

The document is organized into two (2) major parts, namely preliminaries and the guideline. The former covers four main aspects, namely, definition of GTS, purpose of the Guideline, approaches for graduate tracer studies, rationale of the Guideline, and the process of developing the Guideline.

On the other hand, the later part provides the guideline covering different aspects. In particular, the Guideline consist of a broad suite of themes for quality assurance and are categorised into eight (8) areas, namely tracer study concepts and pre-plan activities, study population and sample size, data collection methods and instrument development, data collection and analysis, report writing and dissemination of the tracer study findings and implementation of the tracer study recommendations.

PART ONE

PRELIMINARIES

1.1   Introduction

Universities have a key role to play in ensuring that quality education is offered to all students. An aspect of quality in higher education is the outcomes achieved that adds value by developing job related skills and competencies. In order to satisfy the demands of the job market, universities around the world are devising mechanism to trace and evaluate the impact of the teaching and learning processes in relation to the performance of alumni in the job market. Graduate Tracer Studies (GTS) are commonly becoming a recognizable practice worldwide for monitoring and evaluation of the impact of the teaching and learning processes in the universities.

GTS constitute one form of empirical study that is considered an appropriate means of evaluating the results of the education and training provided by a university. GTS involve identification and follow-up of graduates from higher education institutions (HEIs) worldwide stimulated by the need to give careful consideration to how graduates view their experiences they underwent during their degree study and their transition to the job market. That is, how the knowledge, skills and competencies they acquired at the universities fit the labour market. An important aspect in this connection is related to the questions: how relevant and adequate to the labour market is the education the graduates acquired at the training institution? Are there any areas that require adjustments in the training, learning, and formation processes?

GTS provide data on employability and career aspects, the character of work and related competencies, and information on the professional orientation and experiences of university graduates. Results of such studies can often demonstrate the success of education and training relating to the graduates, labour market, and employers. The information acquired from tracer studies can also indicate possible deficits in a given educational programme and serve as a basis for future planning activities, such that

academic programmes might be brought more closely into line with the needs of the country and the respective University.

MUHAS found the need to develop this Guidelines in order to facilitate the departments/schools/institute in conducting GTS of their alumni as well as job market orientation versus the programmes offered at MUHAS.

1.2 Definition of a Graduate Tracer Study

A Graduate Tracer Study refers to an investigation or series of investigations and evaluations involving a sample of 'graduates' of a training programme (or series of training programmes) at a given time, and again at one or more successive stages in the interest of assessing the appropriateness and/or impact of the programme as well as of fitness of the programme graduates or trainees. A Graduate Tracer Study is sometimes referred to as Alumni Survey, takes place sometime between six months to three years after graduation leads to the analysis of the relationship between higher education institutions and the job market. On the whole, a tracer study is a follow-up survey (hence "tracing") of former students of a programme or programmes of an institution, with a view of getting feedback information regarding their placement, occupational situation and productivity or sense of efficacy after graduation. Such study can be accompanied with employer's satisfaction survey (ESS) that involves employers and other categories of end- users of the graduates of a university institution.

1.3 Purpose of the Guideline

The purpose of these Guideline is to provide guiding principles for the conduct of tracer studies by Departments/schools/institutes at MUHAS, the results from which would feed into a programme review. The Guideline are intended to facilitate the harmonisation of conduct of tracer study processes as part of internal and external quality assurance systems of Higher Learning Institutions.

1.4 Rationale of the Guideline

Tracer studies provide an appropriate basis for evaluating the success, effectiveness and impact of the education and training programmes and for identifying possible strength

and deficits in academic programmes, as well as assessing graduates of the programmes, the labour market and conditions of employment. Tracer studies provide information that is valuable for various stakeholders, and this information helps to inspire or 'invigorate' education, training and employment policies, curricula and course programmes in education and training as well as 'customised' instruction and guidance to help individuals decide or smoothly navigate on their training career paths.

Therefore, in consideration of the above facts, it is important that a university conducts tracer studies periodically as part of quality assurance processes, results from which would feed into a programme under review.

Guideline 2.4.1 of the Standards and Guidelines for University Education in Tanzania, 2019 requires university institutions in the country to undertake tracer studies in specified periodic intervals. In recognition of this, the Curriculum Development Framework which was revised in 2021 requires university institutions in the country to provide evidence of market needs assessment and tracer study as part of programme accreditation requirements. This Guideline therefore have been developed with a view to effectively facilitate universities in the country in conducting tracer studies of their alumni as well as the job market orientation versus the programmes offered.

1.5   Approaches for Conducting Graduate Tracer Studies

Tracer studies are of two principal approaches, namely centralized and decentralized. A centralised approach for conducting a tracer study is the kind of survey initiated and conducted by or on behalf of a central institution or agency over a relatively large and comprehensive population or sample of population across the board. The main objective is to inform ministries and other central bodies about the labour market success of the graduates. The survey normally uses the same questionnaire for all institutions, and since the focus is at the central level rather than individual education and training institutions, reports are normally done at national level. In this regard¸ the tracer study can be a valid instrument for analysing skills mismatch at national level, in combination with information from other sources.

On the other hand, a decentralised approach for conducting a tracer study is one that is initiated and conducted by a given departments/schools/institutes whose concerns may

not necessarily be cross-cutting across the nation but are necessary for the department's/school's/institute's own internal feedback and curricula improvement, innovativeness and institutional development. This feedback for curriculum development and review is often the most important aspect of institutional tracer studies. Analysis at the level of each institutional mega unit becomes a very important way of transforming feedback on the study programme into improvements in the study conditions and content. In any case, however, information on job search, employment conditions and use of 3 college/school/institute-imparted skills at work are also gathered as they link into content, method, technology, etc. of the training programme. The important matter and requirement with a decentralized type of tracer study is that there are certain generic issues or questions that tie together concerns of the institution as a whole, which must be accommodated or integrated into the issues down at the programme level.

1.6   Process of Developing the Guideline

These Guidelines have been developed as an implementation of Guideline 2.4.2 of the Standards and Guidelines for University Education in Tanzania, 2019 which require the Commission to develop guidelines to facilitate universities in conducting tracer studies of their alumni as well as the job market orientation versus the programmes offered in universities.

The Guidelines were developed by a team of experts from university institutions. The process involved review and analysis of relevant literature whereby different materials on tracer studies from various sources were consulted, including similar studies conducted in Tanzania, East Africa, Europe and other parties of the world.

PART TWO

THE GUIDELINE FOR CONDUCTING GRADUATE TRACER STUDIES

Tracer study process has a series of sequential procedures that yield effective and efficient results when they are adhered to. Any successful tracer study undertaking must undergo seven (7) stages, with clear associated activities. These stages include; (i) concepts and planning activities, (ii) sampling and sample size (iii) instrument development, (iv)data collection (v) data analysis and report writing (vi) dissemination of the study findings and (vii) the use of tracer study findings. For each stage, this document provides instructions and guidelines which to a great extent, will facilitate departments/schools/institutes to carry out tracer studies successfully under the central coordination of the Director of Quality Assurance (DQA).

2.1 Tracer study concept and planning activities

For the purpose of conducting tracer study effectively, departments/schools/institutes should make decisions about the objectives of the study, targeted population, resource mobilization and survey instruments.

Guideline

2.1.1 Every department/school/institute shall be required to plan at an early stage the key objectives for carrying out the tracer study and the key issues of the target population (whether all programme graduates or a sample of them), the timing period after graduation and resources required.

2.1.2 Every department/school/institute shall entrust the quality assurance units with the responsibility of effective planning and follow-up of tracer study activities and dissemination of the report.

2.1.3 In carrying out a tracer study, in collaboration with the office of Quality Assurance Unit every department/school/institute shall train its staff in all phases of the study. A team of between five (5) and eight (8) members selected among the trained staff shall be charged with the coordination role.

2.1.4 Every department/school/institute shall develop the tracer study action plan with deliverables for the entire tracer study period.

2.1.5 Every department/school/institute shall ensure a thoughtful selection of individuals knowledgeable with the field of study, data analysis, information technology among others, and who will be able to design and use correctly a variety of methods and tools of analysis in order to produce a valid and reliable report.

2.1.6 Every department/school/institute shall define roles and responsibilities of different actors, and must ensure that they have the proper capacities to execute their roles and responsibilities in planning and conducting the tracer study.

2.1.7 Every department/school/institute shall ensure that tracer study activities and review of curricula are scheduled in the University Almanac. The implementation of tracer study is expected to take between one and 12 months depending on the objective of the tracer study and methodology used in data collection.

2.2   Determining the population and sample sizes

In general, the target group (or target population) in graduate surveys is the total population of graduates, employers and other categories of end- users of the university graduates. Universities should aim to achieve the participation of all graduates of the specific cohort in the survey.

Guideline

2.2.1 For the purpose of reaching the entire constituency of alumni, **MUHAS is urged to establish a database with valid contact details (updated) i.e., graduate addresses including E-mails and phone numbers**. Departments/schools/institutes shall use different strategies for ensuring that the correct addresses of the graduate are available which can also be used for tracking graduates.

2.2.2 Every department/school/institute shall ensure that sampling techniques are systematic and large enough with reasonable geographical scope to inform the objectives of the tracer study.

2.2.3 Institutional tracer studies need participation of as many graduates as possible from the different study programmes. Where possible, every department/school/institute shall include all graduates of a specific cohort.

2.2.4 If partial group is being consulted, the departments/schools/institutes shall determine the appropriate sample size for the tracer study. It is recommended to use scientific methods to estimate the sample size.

2.2.5 In order to achieve a high response rate, every department shall set up a mechanism for reminding respondents before and during the study period. The higher the rate of responses, the more the likelihood of reliability of results that reflect the real situation, perceptions and evaluations of graduates.

2.2.6 For the purpose of getting relevant data, the university shall conduct tracer study survey for ALL programmes, initiated by the departments/schools/institutes which host the programmes, **once every five years** (year 2023, year 2028 etc) following completion of the delivery cycle for the programmes.

2.3   Instrument development

For the purpose of getting realistic impression from tracer studies of its numerous and diverse programmes, every department/school/institute shall develop appropriate instruments for data collection. Some of the areas to be included in the data collection instrument are provided.

Guideline

2.3.1 Every department/school/institute shall plan and design questionnaires and interview guides of good quality and proper length in order to get reliable information. The questionnaires should have a core group of questions that are repeated consistently over time to allow different generations to be compared.

2.3.2 In order to encourage the respondents to participate in the tracer study, Every department/school/institute shall ensure that there is a balance between the content (depth of the information to be collected) and the length of the tools used for data collection.

2.3.3 Every department/school/institute shall develop tracer study tools which capture important information from graduates, commonly includes items such as biodata, education background prior to study, employment status, income, waiting time for employment, methods of job search, job requirements and training qualification, job changes, attitude to jobs, feedback on courses and programmes of training institutions, further education training, work relationship between study and work, current activities, strength and weaknesses of the studied programme, areas for improvement at program and institution level.

2.3.4 Every department/school/institute shall develop tracer study tools which capture important information from the labour market, commonly includes items such as employers' details, required competencies (professional and soft skills), economic sector of employment, and usefulness of the programme.

2.3.5 Since most institutional tracer studies are looking for results to improve study programmes, generic tools used at university level must be customized to capture programme specific requirements.

2.3.6 Every department/school/institute shall train the tracer study and survey teams and ensure that the members participating in the development of the instruments have requisite knowledge needed to develop instrument which are relevant to the objective of the study.

2.3.7 Every department/school/institute shall pre-test the tracer study tools before the actual study is conducted.

2.4   Data collection

Data collection stage is crucial for gathering reliable information. In this phase, the tracer study team needs to have appropriate method for data collection depending on the objective of the study. The data collection method used has to ensure high participation rate through establishment of good contact database, constant reminders to respondents and good rapport.

2.4.1 University shall train team members on tracer study theory and methodology. The training scope should range from imparting requisite knowledge of data collection, data analysis, data interpretation, dissemination, and use.

2.4.2 Data collection methods such as interviews or surveys shall be used to capture information from graduates, employers and end users based on the objective of the tracer study.

2.4.3 Every department/school/institute shall decide on the most appropriate data collection methods which entice response and that are cost effective.

2.4.4 Acceptability and cooperation by the host depends much on the visitor's personality and integrity. Therefore, every department/school/institute shall ensure that questionnaires are administered by academic members of staff with integrity and good rapport.

2.4.5 Every department/school/institute shall ensure that the collected data are properly stored, protected and can be retrieved when needed.

2.5   Data analysis and report writing

This is the stage which deals with the analysis, interpretation of the collected data and report writing. Data analysis is part of a stretch of report writing. There are some technical aspects for proper *data coding* and *data storage* and *retrieval* as well as *data analysis* and *interpretation.*

Guideline

2.5.1 Every department/school/institute shall ensure that data analysis and reporting are professionally done and consistent with the objectives of the study.

2.5.2 Every department/schools/institute shall ensure that the report is presented in the relevant University organs for further action and ownership.

2.5.3 Every department/school/institute shall prepare tracer study report which will be channeled to the University Senate through the Quality assurance unit.

2.6   Dissemination of the tracer study findings

Dissemination of the results and the link with other labour market information tools is a necessary step that will ensure that the results of the study will reach all users. Proper attention to this phase is essential to ensure the effectiveness of the study as not simply/only an academic feedback tool but a labour-market information tool as well.

Guideline

2.6.1 Every department/school/institute may circulate the tracer study report to relevant stakeholders including University management, regulators, and other end users.

2.6.2 Every department/school/institute shall ensure that tracer study report is approved by respective participatory organs of academic units and the Senate.

2.7   Use of tracer study findings

For the tracer study results to be meaningful, they have to fulfil the objectives for which the study was commissioned.

Guideline

2.7.1 Every department/school/institute shall ensure that the tracer study team prepares an action plan for use of the tracer study findings.

2.7.2 Every department/school/institute shall ensure that tracer study findings are used as inputs for programme review and improvement by matching competencies acquired by students with those needed by the labour market, this will be guided by **Curriculum committee**.

2.7.3   Although tracer study information can be used for different purposes depending on the major objectives of the study, every department/school/institute shall ensure that teaching units use tracer study findings to improve their academic activities which will be monitored by **Curriculum committee**.

2.7.4 Every department/school/institute shall entrust the quality assurance units with the responsibility of monitoring the implementation of the action plan and report progress to the relevant decision-making organs of the University.

2.8 Tracer study survey frequency

The objective of the tracer study is to understand the evaluation/feedback as a permanent process, for the conditions/requirements of study courses which are frequently changing. If graduate surveys are implemented regularly, valuable time-oriented reference data are revealed.

When taking the decision concerning the time interval for the implementation of tracer study surveys, consideration should be given to the questions of which graduation years/cohorts are to be tracked.

Guideline

2.8.1 Every department/school/institute shall carry out graduate tracer study for ALL programmes hosted **once every five years** (year 2023, year 2028 etc) following completion of the delivery cycle for the programmes.

2.8.2 Every department/school/institute shall undertake graduate tracer study to inform the process of re-accreditation of the programme in line with Guideline 2.6.1 of the Standards and Guidelines for University Education in Tanzania, 2019.

3.0 Custodian of the document

The Deputy Vice Chancellor responsible for academic matters at MUHAS will be the custodian of this guideline.

4.0 Revision of the guideline

The guideline will be revised after every five years or/and depending on the directives from the Tanzania Commission for Universities (TCU).

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ANNEX 1

IN-DEPTH INTERVIEW GUIDE FOR ALUMNI POSTGRADUATES:

	You will interview postgraduate alumni to learn about their experience of MUHAS programs, curricula and training. Specifically, the interview needs to cover the following:
	In this interview you will cover perspectives on: • Experience of studying at MUHAS • Positive and negative aspects of the MUHAS postgraduate education • Areas where current curricula need to be improved • Program structure • Competencies developed during the training • Improvement needed in program structure • Effectiveness of teaching and learning methods • Availability of education materials and equipment • Effective use of assessment methods • Effectiveness in supervision of postgraduate students • Current opportunities and barriers of curriculum implementation • Suggestions on improving MUHAS postgraduate education

	PROCESS: 1) Use the interview guide to conduct the interview 2) Document personal information before you start the interview 3) Conduct the interview after obtaining permission to tape-record the interview

	SAMPLE: For each region interview Alumni graduates who were under: • School of Medicine • School of Dentistry • School of Pharmacy • School of Nursing • School of Public Health and Social Sciences • School of Traditional Medicine

INTRODUCTION:

Introduce yourself and invite the alumni graduate to participate in the interview.

- My name is ……………………..……. and I am from MUHAS.

- I am here to conduct research that involves MUHAS alumni postgraduates

- The aim is to learn about your experiences regarding MUHAS postgraduate programs

- I foremostly thank you for your readiness to participate in this interview and we very much value your contribution.

- In this interview, there is no wrong response and all contributions matter to us.

INFORMATION OF THE PARTICIPANT AND INTERVIEW:

This information should be used to label the interview

	I will start with your personal information (*but not your name*)
	a) Postgraduate programme attended at MUHAS:
	b) Year joined the University:
	c) Year graduated:
	d) Years of employment:
	e) Current occupation/position:
	Document also the following:
	a) Sex:
	b) Date of Interview:
	c) Location of Interview:
	d) Interviewer:

QUESTIONS:

1. What is your experience in **general on your studies** at MUHAS? (**Probe***: Good things on the training to keep, things that need to be changed or improved, things that need to be removed, things that need to be introduced*)

2. What things do you think you are **capable of doing with confidence in your profession**? (**Probe***: teaching others knowledge, working in the current health system*, *skills and attitude*)
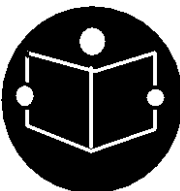
3. How do you think the **MUHAS postgraduate education** prepared you for the market? (**Probe***: any further training needed in order to meet market requirements*)

4. What attributes would you wish a MUHAS postgraduate to have after graduating? (**Probe about**: *effective communication, relationship with others, collaboration, professionalism*)

5. What are your views regarding **the structure of the program that you went through at MUHAS** in terms of the following*:*

   a) *Length of the programme*

   b) *Courses offered*

   c) *Sequence of the courses*

   d) *Duration of courses*

   e) *Courses that need more time*

   f) *Courses that can be offered online*

   g) *Theoretical vs clinical/practical hours*

   h) *Courses that need to be added*

   a) *Courses that need to be omitted*

6. What are your views regarding **teaching and learning methodology** in the postgraduate programme that you went through at MUHAS? (**Probe**: *whether there was use of different methods, whether the methods used were effective in developing required competencies; whether methods were participatory; weaknesses of the methods used*)

7. What was the situation of postgraduate **teaching materials and equipment** at MUHAS? (**Probe**: *whether materials and equipment were available, adequate, and effectively used*)

8. What are your views regarding **assessment methods** (**Probe**: *fairness, nature of examinations, feedback*)

9. What are your views regarding **supervision** of postgraduate students? (**Probe**: *available resources, availability of supervisors; mentorship*)

10. What areas or issues would you **suggest to improve** in relation the postgraduate programme that you went through at MUHAS? (**Probe:** *Faculty competencies in implementing competence-based curriculum, space, teaching materials, incentives, labs, capacity building for faculties*)

11. What are other issues that you would like us to know or hear from you regarding MUHAS postgraduate training?

Thank you very much for your participation

ANNEX 2

IN-DEPTH INTERVIEW GUIDE FOR EMPLOYERS AND SUPERVISOURS

	You will interview employers and supervisors of MUHAS postgraduates to learn about their experience of MUHAS postgraduate programs, curricula and training. In this interview you will cover perspectives on: • Experience regarding employees who graduated from MUHAS postgraduate programs • Preparation of postgraduate students for their roles • Professionalism among employees who graduated from MUHAS postgraduate programs • Expected abilities of employees who graduated from MUHAS postgraduate programs • Suggestions on improving MUHAS postgraduate education

	PROCESS: 1) Use the interview guide to conduct the interview 2) Document personal information before you start the interview 3) Conduct the interview after obtaining permission to tape-record the interview

	SAMPLE: For each region interview the following: • Employers and supervisors of Clinical postgraduates • Employers and supervisors of Dentistry postgraduates • Employers and supervisors of Pharmacy postgraduates • Employers and supervisors of Nursing postgraduates

	• Employers and supervisors of Public Health postgraduates Employers and supervisors of Traditional Medicine postgraduates

INTRODUCTION:

Introduce yourself and invite the alumni graduate to participate in the interview.

- My name is …………………. and I am from MUHAS.

- I am here to conduct research that involves employers and supervisors of employees who graduated from MUHAS postgraduate programs

- The aim is to learn about your experiences regarding MUHAS postgraduate education

- I therefore thank you for your readiness to participate in this interview and I very much value your contribution.

- In this interview, there is no wrong response and all contributions matter to us.

INFORMATION OF THE PARTICIPANT AND INTERVIEW:

This information should be used to label the interview

	I will start with your personal information (*but not your name*)
	a) Postgraduates employed/supervised:
	b) Position/title of the employer/supervisor:
	Document also the following:
	a) Sex of the innterviewee:
	b) Date of Interview:
	c) Location of Interview:
	d) Interviewer:

QUESTIONS:

1. What is your general **experience of postgraduate employees who graduated at MUHAS**? (**Probe**: *their competencies in terms of knowledge, skills and attitude*)

2. How do you think the **postgraduates of MUHAS were** prepared for the current roles? (**Probe**: *if they meet requirements of the job market, if they are capable of employing themselves*)

3. How do **MUHAS postgraduates demonstrate professionalism (Probe:** *relationship with others, work as a team, dress code, respect others….*)

4. What are expected abilities of postgraduates who are to be employed at your work place?

5. What areas or issues would you **suggest to improve** postgraduate education of MUHAS students?

6. What are other issues that you would like us to know or hear from you regarding MUHAS postgraduate training?

Thank you very much for your participation

ANNEX 3

IN-DEPTH INTERVIEW GUIDE FOR PROFESSIONAL COUNCILS

	You will interview Officials of the Professional Councils to learn about their experience regarding MUHAS postgraduate alumni.
	In this interview you will cover perspectives on:
	• Experience about alumni who attended MUHAS postgraduate programs
	• Competencies of MUHAS postgraduate alumni in relation to their roles
	• Aspects of professionalism among MUHAS postgraduates alumni
	• Expected abilities of postgraduates
	• Suggestions on improving MUHAS postgraduate education

	SAMPLE:
	To interview Officials of the:
	• Medical Council of Tanganyika (MCT)
	• Pharmacy Council (PC)
	• Tanzania Nurses and Midwives Council (TNMC)
	• Environmental Health Practitioner Registration Council (EHPRC)
	• Traditional and Alternative Health Practitioner Council (TAHPC)
	• Medical Radiology and Imaging Professional Council (MRIPC)
	• Health Laboratory Practitioners Council (HLPC)

	PROCESS:
	4) Use the interview guide to conduct the interview
	5) Document personal information before you start the interview

	6) Conduct the interview after obtaining permission to tape-record the interview

INTRODUCTION:

Introduce yourself and invite the alumni graduate to participate in the interview.

- My name is …………………. and I am from MUHAS.

- I am here to conduct research that involves officials of Professional Councils

- The aim is to learn about your experiences regarding MUHAS postgraduate programs

- I foremostly thank you for your readiness to participate in this interview and I very much value your contribution.

- In this interview, there is no wrong response and all contributions matter to us.

INFORMATION OF THE PARTICIPANT AND INTERVIEW:

This information should be used to label the interview

	I will start with your personal information (*but not your name*)
	c) Professional council:
	d) Postgraduates regulated:
	Document also the following:
	e) Sex of the interviewee:
	f) Date of Interview:
	g) Location of Interview:
	h) Interviewer:

QUESTIONS:

7. What is your general **experience of postgraduates who graduated at MUHAS**? (**Probe**: *their competencies in terms of knowledge, skills and attitude*)

8. How do you think the **postgraduates of MUHAS are** prepared for the current roles? (**Probe**: *if they meet requirements of the job market, if they are capable of employing themselves*)

9. How do **MUHAS postgraduates demonstrate professionalism (Probe:** *relationship with others, work as a team, dress code, respect others….*)

10. What are expected abilities of postgraduates in your Council?

11. What areas or issues would you **suggest to improve** postgraduate education at MUHAS?

12. What are other issues that you would like us to know or hear from you regarding MUHAS postgraduate training?

Thank you very much for your participation

ANNEX 4

FGD GUIDE FOR MUHAS FACULTY

	You will interview Faculty to learn about MUHAS postgraduate education, curricula and training.
	In this interview you will cover perspectives on:
	• General experience of MUHAS Postgraduate education
	• Positive and negative aspects of the MUHAS postgraduate education
	• Areas where the current curricula need to be improved
	• Program structure in terms of series and coverage
	• Competencies developed during the training
	• Improvements needed in program structure
	• Teaching and learning methods
	• Availability of education materials and equipment
	• Effective use of assessment methods
	• Effectiveness in supervision of postgraduate students
	• Current opportunities and barriers of curriculum implementation
	• Suggestions on improving MUHAS postgraduate programs and teaching/learning

	PROCESS:
	7) Use the interview guide to *guide* the interview
	8) Start with personal information
	9) Conduct the interview after obtaining permission to tape-record the interview.

	SAMPLE:
	MUHAS Faculty in the:

	• School of Medicine • School of Dentistry • School of Pharmacy • School of Nursing • School of Public Health and Social Sciences • School of Traditional Medicine

INTRODUCTION:

Introduce yourself and invite the alumni graduate to participate in the interview.

- My name is …………………. and I am from MUHAS.

- I am here to conduct research that involves MUHAS alumni postgraduates

- The aim is to learn about your experiences regarding MUHAS postgraduate programs

- I foremostly thank you for your readiness to participate in this interview and we very much value your contribution.

- In this interview, there is no wrong response and all contributions matter to us.

INFORMATION OF THE PARTICIPANTS AND FGD:

Participant number	Age (years)	Sex (M/F)	School/ department	Years of experience	Signature
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

QUESTIONS:

13. What is your general **experience of postgraduate education** using competence-based curriculum at MUHAS? (**Probe**: *with respect to the program(s) that FGD participants facilitate*)
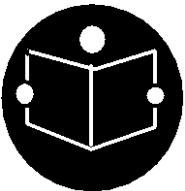
14. How do you think the **CBC curricula** prepare the graduates for the market? (**Probe***: by focusing on MUHAS competency domains (professional knowledge and critical thinking, practical/clinical skills, (student) relationship with clients and communities, teaching skills, maintaining good practice, working within the system and context of health, professionalism, scientific inquiry, intra and inter-professional practice and collaboration*)

15. What are your views regarding **the structure of postgraduate programs at MUHAS** in terms of the following*:*
    i) *Length of the programme*
    j) *Courses offered*
    k) *Sequence of the courses*
    l) *Duration of courses*
    m) *Courses that need more time*
    n) *Courses that can be offered online*
    o) *Theoretical vs clinical/practical hours*
    p) *Courses that need to be added*
    b) *Courses that need to be omitted*

16. What are your views regarding **teaching and learning methodology** in the postgraduate program of MUHAS? (**Probe**: *whether there are use of different methods, whether the methods used are effective in developing required competencies; whether methods are participatory; weaknesses of the methods used*).

17. What do you think is ideal situation of postgraduate teaching **materials and equipment** at MUHAS? (**Probe**: *whether materials and equipment are available, are adequate, and are effectively used*).

18. What are your views regarding **assessment methods** (**Probe**: *fairness, nature of examinations, feedback*)

19. What are your views regarding **supervision of postgraduate students**? (**Probe:** *availability of resources, availability of supervisors, mentorship*)

20. What aspects of MUHAS Competence **Based Curriculum are effectively implemented** in preparing graduates for practice? (**Probe**: *aspects of knowledge, aspects of skills aspects of attitudes/professionalism*)

21. What are the **opportunities/barriers** during the implementation of the current MUHAS CBC?

22. What areas or issues would you **suggest to improve** in relation to MUHAS CBC (**Probe:** *Faculty competencies in implementing CBC and other staff, space, teaching materials, incentives, labs, capacity building for faculties*)

23. What are your **good or/and bad** experiences of MUHAS postgraduate education?

24. What are other issues that you would like us to know or hear from you regarding MUHAS postgraduate education?

Thank you very much for your participation

ANNEX 5

FGD FUIDE FOR MUHAS ONGOING POSTGRADUATE CANDIDATES

	You will interview MUHAS Postgraduate candidates to learn about their education, curricula and training.
	In this interview you will cover perspectives on:
	• General experience of MUHAS Postgraduate education
	• Positive and negative aspects of the MUHAS postgraduate education
	• Areas where the current curricula need to be improved
	• Program structure in terms of series and coverage
	• Competencies developed during the training
	• Improvements needed in program structure
	• Teaching and learning methods
	• Availability of education materials and equipment
	• Effective use of assessment methods
	• Effectiveness in supervision of postgraduate students
	• Current opportunities and barriers of curriculum implementation
	• Suggestions on improving MUHAS postgraduate programs and teaching/learning

	PROCESS:
	10) Use the interview guide to *guide* the interview
	11) Start with personal information
	12) Conduct the interview after obtaining permission to tape-record the interview.

	SAMPLE:
	Ongoing postgraduates who were under:
	• School of Medicine
	• School of Dentistry
	• School of Pharmacy
	• School of Nursing
	• School of Public Health and Social Sciences
	• School of Traditional Medicine

INTRODUCTION:

Introduce yourself and invite the alumni graduate to participate in the interview.

- My name is …………………. and I am from MUHAS.

- I am here to conduct research that involves MUHAS alumni postgraduates.

- The aim is to learn about your experiences regarding MUHAS postgraduate programs.

- I foremostly thank you for your readiness to participate in this interview and we very much value your contribution.

- In this interview, there is no wrong response and all contributions matter to us.

INFORMATION OF THE PARTICIPANTS AND FGD:

Participant number	Age (years)	Sex (M/F)	School/ department	Years of experience	Signature
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

QUESTIONS:

12. What is your general experience in **your studies** at MUHAS from entry to date? (**Probe***: Good things on the training to keep, things that need to be changed, things that need to be removed, things that need to be introduced*).

13. If you were to finish your studies today, what things do you think you are **capable of doing with confidence in your profession**? (**Probe**: *teaching others knowledge, working in the current health system, skills and attitude)*

14. What are your views regarding **the structure of the program that you went through at MUHAS** in terms of the following*:*

    q) *Length of the programme*
    r) *Courses offered*
    s) *Sequence of the courses*
    t) *Duration of courses*
    u) *Courses that need more time*
    v) *Courses that can be offered online*
    w) *Theoretical vs clinical/practical hours*
    x) *Courses that need to be added*
    c) *Courses that need to be omitted*

15. What are your views regarding **teaching and learning methodology** in the postgraduate programme that you went through at MUHAS? (**Probe**: *whether there was use of different methods, whether the methods used were effective in developing required competencies; whether methods were participatory; weaknesses of the methods used*).

16. What was the situation of postgraduate **teaching materials and equipment** at MUHAS? (**Probe**: *whether materials and equipment were available, adequate, and effectively used*).

17. What are your views regarding **assessment methods** (**Probe**: *fairness, nature of examinations, feedback*).

18. What are your views regarding **supervision** of postgraduate students? (**Probe**: *available resources, availability of supervisors; mentorship*)

19. What aspects of MUHAS Competence Based Curriculum are effectively implemented in preparing graduates for practice? (**Probe**: *aspects of knowledge, aspects of skills aspects of attitudes/professionalism*)

20. What are the **opportunities/barriers** during the implementation of the current MUHAS competence based curricula?

21. What areas or issues would you **suggest to improve** in relation to MUHAS CBC (**Probe:** *Faculty competencies in implementing CBC and other staff, space, teaching materials, incentives, labs, capacity building for faculties*)

22. What are other issues that you would like us to know or hear from you regarding MUHAS postgraduate training?

Thank you very much for your participation