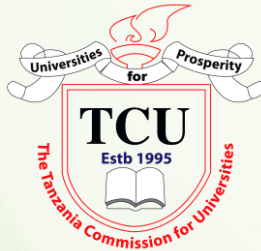


THE TANZANIA COMMISSION FOR UNIVERSITIES



GUIDELINES FOR CONDUCTING TRACER STUDIES BY UNIVERSITY INSTITUTIONS IN TANZANIA

October 2023

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LIST OF ABBREVIATIONS AND ACRONYMS

ESS	Employer's Satisfaction Survey
GTS	Graduate Tracer Study
HEIs	Higher Education Institutions
TCU	Tanzania Commission for Universities

PREFACE

As a regulatory agency of university education in the country, the Tanzania Commission for Universities (TCU) is mandated to monitor and ensure quality, effectiveness and relevance of curricula in universities. Guideline 2.4.1 of the Standards and Guidelines for University Education in Tanzania, 2019, 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 harmonise key aspects of conducting tracer studies by university institutions in the country, Guideline 2.4.2 of the Standards and Guidelines requires the Commission to develop guidelines to facilitate universities in conducting tracer studies of their graduates as well as job market orientation for the programmes offered.

A tracer study is an important quality assurance aspect that informs curricula reviews for quality improvement in university education. Universities have 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 Graduate Tracer Studies (GTS) provide information that is valuable for university institutions, graduates, students 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 analysis of graduates through a systematic survey, which takes place sometime after graduation. According to these Guidelines, 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. 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 between employers and employees.

It is against the above background that TCU has developed these Guidelines for conducting tracer studies in universities which will serve as the minimum benchmarks for universities when carrying out tracer studies of their graduates. These Guidelines are not intended to serve as “Standards” but rather as harmonisation tools that will enable tracer study results be comparable and utilised effectively.

I express my sincere appreciation to the team of experts who developed the Guidelines and the Commission and its committees for guiding the Secretariat on various matters that are clustered within the three broad functions of the Commission, namely regulatory, supportive and advisory. I

am also grateful to Dr. Telemu Kassile (Director of Accreditation, TCU) for overseeing the process of development of the Guidelines from conception to the completion stage of the assignment. I am also particularly grateful to the entire Management team and staff of the Commission for their cooperation and commitment in undertaking their responsibilities as provided in the TCU Rolling Strategic Plan.



Prof. Charles Kihampa
Dodoma, October 2023
Executive Secretary, TCU

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 relevance 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 centres 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 in the country, TCU has developed these Guidelines in order to have a harmonised system of conducting tracer studies by universities.

The document is organised into two major parts, namely preliminaries and the guidelines. The former covers four main aspects, namely definition of GTS, purpose of the

Guidelines, approaches for graduate tracer studies, rationale of the Guidelines, and the process of developing the Guidelines.

The latter part provides the guidelines covering different aspects. In particular, the Guidelines consist of a broad suite of themes for quality assurance and are categorised into eight 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 outcome 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 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

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 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 in line with the needs of the country and the respective university institution.

TCU needed to develop these Guidelines in order to guide universities in conducting GTS of their alumni as well as job market orientation versus the programmes offered in universities.

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. It involves successive stages in assessing the appropriateness and/or impact of the programme as well as of fitness of the programme to graduates or trainees. A Graduate Tracer Study, sometimes

referred to as Alumni Survey, takes place approximately between six months to three years after graduation. It enables 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 regarding their placement, occupational situation and productivity or sense of efficacy after graduation. Such study can be accompanied with an employers’ satisfaction survey (ESS) that involves employers and other categories of end-users of the graduates of a university institution.

1.3 Purpose of the Guidelines

The purpose of these Guidelines is to provide guiding principles for the conduct of tracer studies by university institutions in Tanzania, the results from which would feed into a programme review. The Guidelines are intended to facilitate the harmonisation of conduct of tracer study processes as part of internal and external quality assurance systems of Higher Education Institutions (HEIs).

1.4 Rationale for the Guidelines

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

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 particular, universities are required to provide evidence of market needs assessment and tracer study as part of programme accreditation requirements. These Guidelines 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 can be conducted using either the centralised or decentralised approaches. 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 institution whose concerns may not necessarily be cross-cutting across the nation, but are necessary for the institution'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 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 decentralised 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 at the programme level.

1.6 Process of Developing the Guidelines

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 parts of the world. Further, the draft Guidelines were shared to various stakeholders including university institutions to gather inputs. Comments and suggestions received were incorporated and produced the final version of the Guidelines.

PART TWO

THE GUIDELINES 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 (07) 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 guidelines which to a great extent, will enable universities to carry out tracer studies successfully.

2.1 Tracer Study Concept and Planning Activities

To conduct a tracer study effectively, universities should conceive the idea, plan the activities related to the tracer study and agree on the objectives of the study, target population, resource mobilisation and survey instruments.

Guidelines

- 2.1.1 Every University shall be required to formulate, 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 waiting interval after graduation and resources required.

- 2.1.2 Every University 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, every University shall train its staff in all phases of the study. A team of between five (05) and eight (08) members selected among the trained staff shall be charged with the coordination role.
- 2.1.4 Every University shall develop the tracer study action plan with deliverables for the entire tracer study period.
- 2.1.5 Every University 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 University shall define roles and responsibilities of different actors, and must ensure that they are empowered to execute their roles and responsibilities in planning and conducting the tracer study.
- 2.1.7 Every University shall ensure that tracer study activities and review of curricula feature in their strategic plans and are scheduled in the University

Almanac in the specifically earmarked year. 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.

Guidelines

- 2.2.1 In order to reach the entire constituency of alumni, universities are urged to establish databases with valid contact details (updated) i.e., graduate addresses, including e-mails and phone numbers.
- 2.2.2 Every University shall ensure that sampling techniques are systematic and appropriate 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 University shall include all graduates of a specific cohort.

- 2.2.4 If a small group is being consulted, the University 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 University 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 Every University shall conduct a tracer study survey at least two years after the completion of the delivery cycle of the programme because majority of new graduates in many countries search for their first job for at least a year.

2.3 Development of Data Collection Instruments

To optimise the possibility of getting realistic impression from tracer studies of its numerous and diverse programmes, every University shall develop appropriate instruments for data collection. Some of the areas to be considered in the data collection instrument are provided in *Annex 1*.

Guidelines

- 2.3.1 Every University shall design and develop 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 University 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 collection¹.

2.3.3 Every University shall develop tracer study tools which capture important information from graduates. Such information includes items such as biodata, educational background prior to study, employment status, income, waiting interval for employment, methods of job search, job requirements and training qualification, job changes, attitude to jobs, feedback on relevance courses and programmes of training institutions, further education training, relationship between study and work, current activities, strengths and weaknesses of the studied programme, and areas for improvement at programme and institutional level.

¹ Generally, in order to collect reliable information, a questionnaire should be designed to be completed within one hour. A questionnaire that can be completed in more than one hour is not recommended as it can be a source for non-response and unreliable information especially if the questionnaire is self-administered.

- 2.3.4 Every University shall develop tracer study tools which capture important information from the labour market, including 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 customised to capture programme specific requirements.
- 2.3.6 Every University 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 University 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.

Guidelines

- 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 shall be used to capture information from graduates, employers and end users based on the objective of the tracer study.
- 2.4.3 Every University 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 University shall ensure that questionnaires are administered by academic members of staff with integrity and good rapport.
- 2.4.5 Every University 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.

Guidelines

- 2.5.1 Every University shall ensure that data analysis and reporting are professionally done and consistent with the objectives of the study.
- 2.5.2 Every University shall ensure that the report is presented in the relevant University organs for further action and ownership.
- 2.5.3 Every University shall prepare tracer study report in line with the format attached herewith as **Annex 2**.

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.

Guidelines

- 2.6.1 Every University may circulate the tracer study report to relevant stakeholders including University Management, regulators, and other end-users.

- 2.6.2 Every University shall ensure that the 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.

Guidelines

- 2.7.1 Every University shall ensure that the tracer study team prepares an action plan for use of the tracer study findings.
- 2.7.2 Every University 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.
- 2.7.3 Although tracer study information can be used for different purposes depending on the major objectives of the study, every University shall ensure that teaching units use tracer study findings to improve their academic activities.
- 2.7.4 Every University 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.

Guidelines

- 2.8.1 Every University shall carry out graduate tracer study at least two years after the completion of the delivery cycle of the programme.
- 2.8.2 Every University 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.

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ANNEXES

Annex 1: Areas for key questions to graduates and employers

A. Graduates

Tracer study data collection instruments are expected to contain the following key information among others

- 1) Educational background prior to study.
- 2) Programme of study (programme studied, mode of study, year of enrolment and year graduated).
- 3) Teaching and learning conditions during studies.
- 4) Job search (duration of search for the first job, method of job search, challenges encountered during job search).
- 5) Sequence of professional activities.
- 6) Employment (employment status (employed/self-employment), income level, working time, type of contract, job title, economic sector-private or public).
- 7) Acquired competencies and work requirement (relevance of the programmes and specific courses and topics in line with labour market and required skills)
- 8) Work and competencies, relationships between study and work.
- 9) Work orientations and job satisfaction.
- 10) Further education and training.

- 11) Regional and international mobility.
- 12) Social biographic data.
- 13) Retrospective assessment of study.

B. Labour market (employers, potential employers, professional bodies, and other end users)

Tracer study data collection instruments is expected to contain the following key information among others

- 1) Characteristics of the organisation (name of organisation, organisation type, sector, age and size of the company, total number of employees, location, local or international).
- 2) Recruitment procedures and criteria.
- 3) Perception of employers on quality of training in a particular field.
- 4) Requirement of employers for further academic and professional training.
- 5) Professional untypical tasks (relationship between field of study and profession).
- 6) Knowledge and skills usually graduate lack.
- 7) Level of skills shortage in the organisation.
- 8) Graduate competencies and skills.

Note: Customisation of the tools can be done depending on the objective of the study and field of specialisation

Annex 2: Format of tracer study report

Tracer study report is expected to contain the following key information among others

Preliminary

Cover page –

Table of contents –

List of tables –

List of figures –

List of abbreviations and or acronyms –

Acknowledgements

Executive summary

Chapter One: Introduction

- Background
- Objective of the tracer study
- Rationale of the tracer study

Chapter Two: Research Methodology

- Tracer study design
- Study cohort
- Sample and sampling procedure
- Data collection instruments
- Pre-testing of data collection instruments
- Preparation for data collection

- Data collection process and storage
- Data cleaning

Chapter Three: Data Analysis and Presentation

Chapter Four: Summary of Key Findings and Discussion

Chapter Five: Conclusion and Action Plan

References

Appendices