THE IMPACT OF FEE-FREE EDUCATION ON QUALITY EDUCATION IN PUBLIC PRIMARY SCHOOLS IN TANGANYIKA DISTRICT COUNCIL, KATAVI REGION

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A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF EDUCATION IN ADMINISTRATION, PLANNING AND POLICY STUDIES

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2025

CERTIFICATION

The undersigned certifies that they have read and hereby recommends for acceptance by the Open University of Tanzania a dissertation entitled: **"The Impact of Fee-Free Education on Quality Education in Public Primary Schools in Tanganyika District Council, Katavi Region",** in partial fulfillment of the requirements for the Degree of Master of Education in Administration, Planning and Policy Studies of the Open University of Tanzania.

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DECLARATION

I, **Andrew William Edward,** declare that the work presented in this dissertation is original. It has never been presented to any other University or Institution. Where other people's works have been used, references have been provided. In this regard, I declare this work to be my original work. It is hereby presented in partial fulfilment of the requirements for the Degree of Master of Education in Administration, Planning and Policy Studies of the Open University of Tanzania.

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Signature

……..

Date

DEDICATION

This dissertation is dedicated to my beloved parents, Mr and Mrs Edward Mbyuzi, whose love, sacrifices, and wisdom have shaped every step of my journey. You have always been my rock, providing me with the strength, encouragement, and values that have guided me to this point. To my dear wife, Lucy Paschal Thomas, your unwavering belief in me and constant support have kept me going even when the road was tough. And to my precious children, Gladness A. Edward and Darlene A. Edward, your laughter and love remind me every day of the true meaning of perseverance and the importance of education.

This achievement is not just mine; it belongs to all of us. You have been my constant source of inspiration, my strength, and my heart. I am forever grateful to each of you for standing by me, cheering me on, and making this journey worth every moment. Thank you for everything.

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This research would not have been successful without the collective efforts of all involved. I deeply appreciate the time, dedication, and effort of everyone who participated, and I hope that the findings will contribute to meaningful improvements in education for children across Tanzania.

ABSTRACT

This study explored the impact of Tanzania's fee-free education policy, implemented in 2015, on the quality of primary education in public schools in Tanganyika District, Katavi Region . Framed by Bertalanffy's Systems Theory (1968), the research examined the policy's effects on enrollment (input subsystem), teaching and learning quality (process subsystem), and resource-related barriers (feedback loops) affecting educational outcomes. A convergent parallel mixed-methods design was employed, combining descriptive statistical analysis of quantitative data (enrollment records, questionnaires from 397 respondents: 327 pupils, 60 teachers, seven head teachers, 2 Ward Education Officers, 1 District Education Officer) with thematic analysis of qualitative data (interviews with education officials, head teachers, and teachers). Findings revealed a substantial enrollment increase from 2015 to 2020, with balanced growth for boys and girls, indicating the policy's success in enhancing access by removing financial barriers. However, the quality of teaching and learning faced challenges, as increased resources and reduced dropout rates did not consistently translate into improved education due to systemic constraints. Key barriers included overcrowded classrooms, inadequate infrastructure, teacher shortages, insufficient funding, and limited community engagement, which hindered quality in rural settings. The study concludes that while the policy significantly improved access, it strained quality due to resource constraints, contributing to Systems Theory by highlighting rural-specific subsystem imbalances. Recommendations include government investment in infrastructure, teacher recruitment, and professional development, alongside community initiatives to address indirect costs like uniforms and transportation. Future research should explore long-term academic outcomes, urban-rural differences, teacher coping strategies, and socio-economicc impacts to ensure sustainable, high-quality education.

Keywords: *Fee-free education, quality education, primary school*

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LIST OF ABBREVIATIONS

DEOs	District Education Officers
EFA	Education for All
RAS	Regional Administrative Secretary
SPSS	Statistical Package for Social Sciences
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organisation
WEOs	Ward Education Officers

CHAPTER ONE

INTRODUCTION

1.1 Introduction

This study investigates the impact of fee-free education on the quality of primary education in public primary schools in Tanganyika District Council, Katavi Region, Tanzania. The fee-free education policy, introduced in Tanzania in 2015 aimed to eliminate financial barriers to education, thereby enhancing access and equity. However, while increased enrollment has been a notable outcome, concerns have emerged about the policy's impact on educational quality due to resource constraints and infrastructural challenges. This chapter provides the background to the problem, articulates the research problem, outlines the objectives and research questions, highlights the study's significance, and clarifies its limitations and delimitations.

1.2 Background to the Problem

The global pursuit of Universal Primary Education (UPE) is rooted in the 1948 United Nations Declaration of Human Rights, which establishes education as a fundamental human right accessible to all, regardless of socio-economic status (United Nations, 1948). The education system reinforces this commitment to the All (EFA) initiative, which, in Sub-Saharan Africa, has been instrumental in increasing enrollment, particularly for disadvantaged groups. For instance, studies in East Africa show that eliminating school fees significantly boosts primary school enrollment, especially among low-income families (World Bank, 2023). In Tanzania, the fee-free education policy was introduced through Education Circular No. 3 of 2016, as part of the second phase of the Primary Education Development Program

(Tanzania, 2016). This policy aimed to ensure that all school-age children could enrol in primary schools without financial barriers. As a result, enrollment rates surged across the country, including in Katavi Region, where pupil numbers increased from 9,919 in 2015 to 16,388 in 2020 (Tanganyika District Council, 2020). Considering pupils' enrolment in Katavi Region after the implementation of fee-free education, as shown in Table 1.1, there is a clear linear increase in pupils' enrolment. This indicates a direct correlation between the policy and the rise in school attendance.

Table 1.1: Pupils' Enrolment in Katavi Region after the Implementation of Fee-Free Education

Year	Boys enrolled	Girls Enrolled	Total
2015	4980	4939	9919
2016	5540	5879	11419
2017	6450	5968	12418
2018	66775	6543	13318
2019	7109	6909	14018
2020	8407	7981	16388

Source: Tanganyika DC

The data presented in Table 1.1 provide strong evidence that the implementation of fee-free education in the Katavi Region has had a significant positive impact on pupil enrollment. However, the sudden surge highlighted substantial gaps in preparedness, as schools became overwhelmed with new registrations and struggled with shortages of classrooms, resources, and teachers. As a result, the quality of education declined due to imbalanced teacher-pupil ratios, revealing inadequate policy planning (Nielsen, 2014).

However, this rapid increase has strained educational infrastructure, leading to overcrowded classrooms and, in some schools, class sizes of up to 180 pupils (Temu, 2018, p. 45). Additionally, 52% of schools in rural areas lack essential facilities like toilets, and the pupil-teacher ratio in some districts has reached 72:1, far exceeding the national standard of 40:1 (Temu, 2018, pp. 46–47). While the policy has enhanced access, it has raised concerns about the quality of education. Overcrowding and resource shortages, such as insufficient textbooks and desks, have compromised teaching and learning processes (Nielsen, 2014). In Katavi Region, the influx of pupils has highlighted gaps in school preparedness, including inadequate teacher training and infrastructure, which negatively affect educational outcomes (HakiElimu, 2020). These challenges underscore the need to examine how fee-free education affects not only access but also the quality of primary education in Tanzania, particularly in rural areas such as Tanganyika District.

1.3 Statement of the Problem

The introduction of fee-free primary education in Tanzania aimed to enhance access to quality education by removing financial barriers for disadvantaged families (Tanzania, 2016). While the policy has significantly increased enrollment, concerns remain about its impact on educational quality due to inadequate resources, overcrowded classrooms, and strained teacher-pupil ratios (HakiElimu, 2020; Temu, 2018). Existing studies, such as those by Glewwe et al. (2016), have focused on enrollment trends but often overlook the specific challenges schools face in maintaining quality education amid increased pupil numbers. In Tanganyika District, the lack of preparedness among head teachers and insufficient infrastructure

exacerbate these issues, potentially undermining the policy's goal of delivering quality education (Obasi & Muwonge, 2022). This study addressed this gap by investigating how the fee-free education policy affects the quality of primary education, focusing on enrollment trends, teaching and learning quality, and implementation challenges in Katavi Region.

1.4 General Objective

The primary objective of this study was to examine the impact of the fee-free education policy on the quality of primary education in public primary schools in Tanganyika District, Katavi Region.

1.5 Specific Objectives

The following specific objectives guided the study:

i. To examine the effect of fee-free education on pupil enrollment in public primary schools in Tanganyika District, Katavi Region.
ii. To evaluate the impact of fee-free education on teaching and learning quality in public primary schools in Tanganyika District, Katavi Region.
iii. To assess how resource-related barriers influence the quality of education under the fee-free education policy in public primary schools in Tanganyika District, Katavi Region.

1.6 Research Questions

The study addresses the following research questions:

i. How has fee-free education affected pupil enrollment in public primary schools

in Tanganyika District, Katavi Region?

ii. What is the impact of fee-free education on the quality of teaching and learning in public primary schools in Tanganyika District, Katavi Region?

iii. How do resource-related barriers influence the quality of education under the fee-free education policy in public primary schools in Tanganyika District, Katavi Region?

1.7 Significance of the Study

This study offers valuable insights for various stakeholders in Tanzania's education sector. For policymakers, the findings can guide the refinement of fee-free education strategies, ensuring adequate resource allocation to balance access and quality (UNESCO, 2024). The study empowers communities by highlighting the policy's impact and fostering collaboration among parents, educators, and local authorities to address indirect costs such as uniforms and transportation (Mbilinyi et al., 2016). For schools, the results provide a framework for strategic planning, enabling head teachers to address challenges like overcrowding and resource shortages (HakiElimu, 2020). For pupils, the study underscores the importance of sustained access to quality education, equipping them with skills for personal and societal development (World Bank, 2023). Finally, the research contributes to the academic field by adding to the body of knowledge on fee-free education policies and by enhancing the researcher's expertise in education policy analysis.

1.8 Limitations of the Study

This study faced several limitations related to its research approach and design. The

use of a convergent parallel mixed-methods design, while comprehensive, may be constrained by the researcher's ability to integrate qualitative and quantitative data effectively, potentially affecting the depth of analysis (Creswell & Poth, 2021). Additionally, reliance on self-reported data from questionnaires and interviews may introduce response bias, as participants may provide socially desirable responses. The study's focus on four primary schools in Tanganyika District limits the generalizability of findings to other regions or contexts. Time and resource constraints also restricted the scope of data collection, preventing a longitudinal analysis of long-term policy impacts.

1.9 Delimitations of the Study

This study is deliberately delimited to public primary schools in Tanganyika District, Katavi Region, to focus on a specific rural context where the challenges of fee-free education are pronounced. The study includes four primary schools from two wards within the district, selected to represent diverse socio-economic conditions. It employs a convergent parallel mixed-methods approach, combining quantitative data (e.g., enrollment statistics, questionnaires) with qualitative data (e.g., interviews with education officials and teachers) to ensure a focused yet comprehensive analysis. The study excludes private schools and secondary education to maintain a clear scope on the impact of the fee-free policy in public primary education settings.

1.10 Operational Definitions of Key Terms

Fee-Free Education means that pupils study or are studying without parents or guardians paying fees or other contributions. (Education sircular number 3, 2016).

Quality of Education: Is education that ensures all learners gain essential knowledge, skills, values and attitudes to reach their full potential and contribute positively to society. (UNESCO, 2020)

Pupil Enrollment: Is the process of registering pupils into a school and officially counting the number of learners attending the school. (UNICEF, 2021). This means the number of pupils registered and attending public primary schools, as recorded in school records.

Resource-Related Challenges: Are problems caused by shortages, mismatches, or unequal distribution of resources needed to carry out activities. (UNESCO, 2020)

1.11 Chapter Summary

This chapter introduces the study on the fee-free education policy's impact on primary education quality in public primary schools in Tanganyika District, Katavi Region. It outlines the context, problem, objectives, and scope, emphasising increased enrollment alongside resource constraints that affect quality. The objectives guide the investigation into enrollment, teaching quality, and resource barriers.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter sets a foundation by reviewing relevant theories and empirical studies that underpin the research. It focuses on three objectives: examining the impact of the fee-free education policy on pupil enrollment, teaching and learning quality, and resource-related barriers. Guided by Bertalanffy's Systems Theory (1968), which views schools as interconnected systems, the chapter analyses how changes in one element affect others. It is organised into the theoretical framework, empirical literature aligned with the study objectives, and the identified research gaps that justify the study conducted in Tanganyika District, Katavi Region.

2.2 Theoretical Framework

Bertalanffy's Systems Theory (1968) was used to guide the study because it offers a framework for understanding schools as systems composed of parts that work together. According to this theory, a change in one part, such as removing school fees, impacts the whole system. For example, more pupils joining schools might stretch resources thin, affecting how teachers deliver lessons and, ultimately, the quality of education. The theory discusses inputs (such as policies), processes (such as teaching), outputs (such as pupil learning), and feedback loops (such as teachers' or parents' responses to challenges).

This perspective helps me see how the fee-free policy in Tanzania creates ripples across the education system. When the researcher reviewed existing research, they

noticed that many studies focus on one piece of the puzzle like enrollment increases without considering how all parts of the system interact, for instance, global reports often highlight how fee-free policies boost access but don't dig into how they strain resources or teaching quality in places like Tanzania. Locally, some studies mention overcrowded classrooms in rural areas, but they don't fully explore how these issues connect to the broader system. In Katavi, where schools often lack enough teachers or desks, these connections are crucial. Systems Theory shows that without balancing resources with pupil numbers, the policy might improve access but harm quality. This gap in the literature, especially in rural Tanzanian contexts, drives this study to examine how enrollment, teaching, and resources interact in Tanganyika District, setting it apart from others that take a narrower view.

2.3 Empirical Literature Review

Here, the study reviewed studies related to the study's objectives, focusing not just on what they found but also on how they conducted their research, their research designs, data collection methods, and who they studied. The study used Systems Theory to connect their findings to this study, critique their approaches, and show why this study's mixed-methods design, combining surveys and interviews, is needed. The study also included Tanzanian studies to ground it in the local context, especially in Katavi.

2.3.1 Effect of Fee-Free Education on Pupil Enrollment

Research worldwide shows that fee-free education policies increase pupil numbers, but the methods used reveal gaps that this study can address. A study in Mexico by

Barrera-Osorio et al. (2020) used a difference-in-differences approach, analysing enrollment records from 150,000 pupils across urban and rural schools from 2010 to 2015. They found a 12% increase in enrollment, especially among poorer families, showing that removing fees opens the door to education. Through Systems Theory, the researcher sees this as a policy input that boosts the enrollment subsystem. Still, the study does not explore how it affects resources or teaching, which could strain the system.

In Tanzania, Glewwe et al. (2020) took a similar approach, using surveys and school records from 3,000 households between 2015 and 2018. They reported a 20% enrollment increase after the fee-free policy started, but pupil test scores didn't improve, suggesting that more pupils stretched resources thin. This aligns with Systems Theory's idea that an unbalanced system cannot deliver high-quality outputs. However, their focus on numbers left out teachers' or parents' views, which could explain why quality lagged. Closer to home, Mbilinyi et al. (2016) interviewed 150 Tanzanian stakeholders parents, teachers, and officials and found a 15% enrollment increase in rural areas like Katavi. They noted that costs like uniforms still keep some kids out, a feedback loop Systems Theory highlights. Their interviews provide valuable insights, but without quantitative data, it's hard to gauge the scale of the issue.

Other studies add more context. Dreze and Chaudhary (2017) used regression analysis of Indian census data, focusing on girls, and found that enrollment grew more slowly in areas with social inequalities, showing that local factors matter.

Pritchett (2016) reviewed 70 studies worldwide and noted that costs, such as transportation, can limit enrollment gains a challenge I've seen in Katavi's rural communities. Baird et al. (2018) ran a randomised trial with 2,000 pupils in Afghanistan, using surveys and attendance records, and found that community involvement boosts enrollment. These studies are strong but often miss the full picture in rural Tanzania, where schools face unique resource challenges. The researcher believes this study's combination of enrollment data and interviews with teachers and officials in Tanganyika District will provide a clearer picture of how the policy operates in a rural setting.

2.3.2 Impact of Fee-Free Education on Teaching and Learning Quality

When it comes to teaching and learning, studies show that fee-free policies can pose challenges by overwhelming schools, and these studies inform this study's approach. Hanushek and Wimer (2008) analysed data from 1,500 U.S. school districts using regression models to examine funding and pupil outcomes. They found that more money helps, but sudden enrollment increases dilute resources, hurting teaching quality. Systems Theory explains this as a strain on the teaching process subsystem, a problem the researcher expected in Katavi's crowded classrooms.

In India, Muralidharan and Sundaravalli (2013) studied 500 teachers across 60 schools, using classroom observations and surveys in an experimental design. They showed that classes with over 50 pupils reduce teaching quality because teachers are overwhelmed, a finding that resonates with Systems Theory's focus on process strain. In Tanzania, Kilonzo (2020) used surveys and focus groups with 200 teachers

in Dodoma, finding that fee-free policies led to teacher burnout due to insufficient training. While this study is local, its urban focus limits its relevance to Katavi's rural schools, where infrastructure is scarcer. The researcher thinks Kilonzo's mix of methods is useful, but a larger sample that includes rural areas would strengthen the findings.

Jacoby (2014) examined 700 Ugandan schools using econometric models and school records, showing that overcrowding led to closures and weaker pupil performance — a feedback loop that Systems Theory predicts. Bedewell et al. (2007) studied 1,800 teachers across developing countries, using surveys and interviews, and stressed that better pay keeps good teachers, especially when pupil numbers rise. These studies are insightful but often focus on numbers over experiences. In Katavi, where teachers deal with large classes and few resources, the researcher believes that combining surveys with interviews, as the researcher planned to do, would better capture how the policy affects teaching and learning quality.

2.3.3 Resource-Related Barriers Influencing Educational Quality

Resource challenges are a major issue in fee-free education, and studies show how they affect quality, which guides this study's methodology. Glewwe et al. (2016) used a difference-in-differences approach based on surveys and school inspections from 2,500 Tanzanian households, finding that enrollment growth raised pupil-teacher ratios to 72:1, thereby hurting quality. Systems Theory sees this as an overwhelming resource, a challenge I've noticed in Katavi's schools. Their quantitative focus misses teachers' stories, which could explain how shortages feel on the ground.

Kremer et al. (2013) ran a randomised evaluation in 300 Kenyan schools, using attendance logs and interviews, and found that cash transfers boost attendance but not quality without more classrooms or teachers. This aligns with Systems Theory's idea of feedback loops. In Tanzania, HakiElimu (2020) interviewed 100 stakeholders and reported that 52% of rural schools lack basic facilities, such as toilets —a problem in Katavi. Their qualitative approach is strong, but it needs numbers to show the scale of the issue. Barrera-Osorio et al. (2020) studied 100,000 Mexican pupils using school records and found rural schools struggle with resource shortages despite higher attendance, similar to Katavi's challenges.

Duflo et al. (2019) surveyed 1,500 girls in Pakistan and found that costs, such as transportation, limit the benefits of fee-free policies a barrier relevant to Katavi's rural families. Mbilinyi et al. (2016) interviewed 130 Tanzanian stakeholders and highlighted how community support can ease resource shortages, a strategy worth exploring in Tanganyika District. These studies, while valuable, don't fully tackle rural Tanzania's unique challenges. The researcher thinks this study's approach, using both enrollment data and interviews with teachers and officials, will offer a fuller picture of how resource barriers affect quality in Katavi.

2.4 Literature Synthesis and Research Gap

Viewed through the lens of Systems Theory, the reviewed literature reveals that while fee-free education policies have significantly increased student enrollment, they have simultaneously strained resource availability and the quality of teaching and learning. Quantitative studies such as Glewwe et al. (2016) and Barrera-Osorio

et al. (2020) highlight the policy's success in boosting enrollment but also emphasise challenges in sustaining adequate infrastructure, learning materials, and teacher-student ratios. In contrast, local qualitative studies by Haki Elimu (2020) and Mbilinyi et al. (2016) provide valuable Tanzanian insights into the effects of the policy.

However, they primarily focus on urban settings and do not capture the rural realities of regions like Katavi. However, few studies have integrated quantitative and qualitative approaches to examine how key variables enrollment trends, resource distribution, and teaching quality interact within rural education systems. This study bridges that gap by adopting a mixed-methods design to assess the sustainability of the fee-free education policy and its impact on teaching and learning quality in Tanganyika District, thereby contributing new evidence relevant to rural Tanzania and similar contexts.

2.5 Chapter Summary

This chapter has laid out a foundation for this study by reviewing research on the impact of fee-free education on primary schools. This Systems Theory shows how enrollment growth affects resources and teaching quality, and I've pointed out gaps in studies that overlook rural Tanzania's challenges. By examining how other researchers conducted their work, I've justified this study's decision to use both surveys and interviews to obtain a comprehensive picture.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the methodology the researcher used to investigate how Tanzania's fee-free education policy affects the quality of primary education in public primary schools in Tanganyika District, Katavi Region. This chapter details the research approach, design, study area, population, sampling techniques, data collection methods, analysis procedures, and ethical considerations.

3.2 Research Approach

The study used a mixed-methods approach, integrating quantitative and qualitative methods to capture both numerical trends and lived experiences. Quantitative methods, such as questionnaires, provide measurable data on enrollment and resource availability, while qualitative methods, like interviews, offer in-depth perspectives on teaching quality and implementation challenges. This approach addressed Chapter Two's call for holistic analyses (Creswell & Poth, 2021) and fills gaps in prior studies that relied heavily on single-method designs. The convergent parallel design allowed simultaneous data collection and analysis, ensuring a robust investigation of the policy's impact in Tanganyika District.

3.3 Research Design

This study employed a convergent parallel mixed-methods design, collecting quantitative and qualitative data concurrently, analysing them separately, and integrating results to address the objectives. This design balanced quantitative data

(e.g., enrollment statistics) with qualitative insights (e.g., teachers' challenges), providing a comprehensive view of the policy's effects. Its structured approach ensures reproducibility, with clear procedures outlined below.

3.4 Area of Study

The study was conducted in Tanganyika District, Katavi Region, a rural area in western Tanzania characterised by an agricultural economy and limited educational infrastructure. The researcher chose Tanganyika District because its 65 public primary schools face challenges like overcrowded classrooms and resource shortages, making it ideal for studying the fee-free policy's impact. The district serves a large pupil population across 14 wards, providing a relevant context for addressing the rural-focused gaps identified in Chapter Two (Tanganyika District Council, 2020).

3.5 Target Population

The target population included all key stakeholders in public primary education in Tanganyika District: approximately 51,282 pupils, 780 teachers, 65 head teachers, 14 Ward Education Officers (WEOs), and 1 District Education Officer (DEO). These groups were selected because they directly experience or manage the policy's implementation, offering diverse perspectives on enrollment, teaching quality, and resource barriers (Tanganyika District Council, 2020).

3.6 Sampling Techniques and Sample Size

To achieve a representative sample, the researcher used purposive and simple

random sampling, with the sample size calculated using Yamane's (1967) formula to ensure the total sample of 397, as used in Chapter Four. Below, the researcher explained the sampling process, school selection, and sample size calculation, addressing the supervisor's request for detailed clarity.

3.6.1 Sampling Techniques

The researcher applied purposive sampling for the DEO and WEOs due to their unique administrative roles. One DEO was included for district-level insights, and 2 out of 14 WEOs were selected from wards with diverse socio-economic profiles. For teachers, head teachers, and pupils, the researcher used simple random sampling to minimi bias. The researcher assigned numbers to individuals in each group and used a random number generator to select participants, ensuring equal selection probability.

3.6.2 School Selection

The researcher purposively selected four public primary schools from two wards, Bulamata and Ikola, in Tanganyika District to reflect diversity in enrollment size and infrastructure conditions. Ikola is closer to urban centres, while Bulamata is more isolated, capturing a wider range of policy impacts. The schools (two per ward) were chosen based on enrollment (large vs. small) and facilities (e.g., classroom availability), representing the district's 65 schools.

3.6.3 Sample Size Calculation

The sample size was calculated using Yamane's (1967) formula for finite

populations: $n = \frac{N}{1+N(e)^2}$ where $n$is the sample size, $N$is the population size, and $e$is the margin of error (0.05 for 95% confidence). The total population is 52,140, reflecting the sum of stakeholder groups: 51,282 pupils, 780 teachers, 65 head teachers, 14 WEOs, and 1 DEO.

Applying the formula: $n = \frac{52,142}{1+52,142(0.05)^2} = \frac{52,142}{1+52,142(0.0025)} = \frac{52,142}{131.35} \approx 397$

The sample was distributed proportionally across groups, adjusted for practicality and relevance to the objectives:

Pupils (N = 51,282): Using Yamane's formula, $n = \frac{51,282}{1+51,282(0.05)^2} \approx 396.$

The researcher selected 327 pupils (approximately 82 per school) via random sampling, focusing on Standards 4-7 to capture diverse perspectives.

Teachers (N = 780): $n = \frac{780}{1+780(0.05)^2} \approx 260.$

The researcher selected 60 teachers (15 per school) to balance feasibility, focusing on core subject teachers (e.g., mathematics, Kiswahili).

Head Teachers (N = 65): The researcher selected 7 head teachers from the four schools and three additional schools in nearby wards to ensure leadership perspectives, using purposive sampling.

WEOs (N = 14): Two were purposively selected from Bulamata and Ikola wards.

DEO (N = 1**)**: The single DEO was included.

Table 3.1: Sample Size

Respondent Group	Population	Sample Size	Sampling Technique
Pupils	51,282	327	Simple Random
Teachers	780	60	Simple Random
Head Teachers	65	7	Purposive
WEOs	14	2	Purposive
DEO	1	1	Purposive
Total	**52,142**	**397**	

3.7 Data Collection Methods and Instruments

The study used questionnaires and semi-structured interviews to collect data, each linked to specific instruments in the appendices and designed to gather distinct data types, as requested by the supervisor.

3.7.1 Questionnaire

The researcher piloted it with 20 respondents (10 pupils, 10 teachers) to ensure clarity, achieving a reliability index of 0.83 (Cronbach's alpha), indicating high consistency. The researcher administered a questionnaire (Appendix I) to 327 pupils and 60 teachers to collect quantitative data on enrollment trends, perceptions of teaching quality, and resource availability. The questionnaire used a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree) for statements like:

"The fee-free policy has increased pupil enrollment in my school" (Section 1, Appendix I).

"Teachers have enough time to support all pupils" (Section 2, Appendix I).

These questions targeted enrollment numbers, teaching effectiveness, and resource sufficiency, respectively. The full questionnaire is in Appendix I

3.7.2 Semi-Structured Interviews

The study conducted semi-structured interviews (Appendices III–V) with 7 head teachers, 2 WEOs, and 1 DEO to collect qualitative data on experiences with enrollment changes, teaching challenges, and resource barriers. Questions included:

“How has the fee-free policy changed pupil enrollment?” (Enrollment trends).

“What challenges do teachers face in maintaining quality?” (Teaching quality).

“How do resource shortages affect the policy’s implementation?” (Resource barriers).

Interviews lasted 20-30 minutes, were audio-recorded with consent, and transcribed verbatim. This qualitative data complements the questionnaire’s numerical insights.

3.8 Pre-testing/Piloting Study

The researcher piloted the questionnaire with 20 respondents (10 pupils, 10 teachers) and the interview guide with 2 head teachers from non-sampled schools in Tanganyika District. The pilot ensured clarity of questions and consistency of responses. The researcher revised the ambiguous Likert-scale instructions based on feedback. The questionnaire’s reliability (Cronbach’s alpha = 0.83) and the interview pilot responses confirmed the instrument's suitability.

3.8.1 Validity of Instruments

The study ensured validity by aligning the questions with the objectives and by having them reviewed by the supervisor, for content accuracy. The pilot study verified that instruments measured intended constructs (enrollment, quality, resources).

3.8.2 Reliability of Instruments

The questionnaire's reliability was confirmed with Cronbach's alpha (0.83). Interview reliability was ensured by standardising questions and verifying transcript accuracy against recordings.

3.9 Data Analysis Plan

This study utilised a convergent parallel mixed-methods design to examine the impact of Tanzania's fee-free education policy on primary education quality in Tanganyika District, Katavi Region, employing Bertalanffy's Systems Theory (1968) to frame enrollment as an input subsystem, teaching/learning as a process subsystem, and resource barriers as feedback loops. Quantitative data, including enrollment records and questionnaires from 387 respondents (327 pupils, 60 teachers) were analysed using descriptive statistics (frequencies, means) in SPSS version 25 to summarise trends in enrollment, teaching quality perceptions, and resource availability.

Qualitative data from interviews with 7 head teachers, 2 Ward Education Officers, 1 District Education Officer), were analysed thematically, following Braun and Clarke's (2006) six-step process:familiarisationfamiliarisation through repeated transcript readings, generating codes grouped into themes (e.g., "Enrollment Surge Impacts," "Teaching Quality Challenges," "Resource Constraints"), reviewing themes for accuracy, defining themes clearly (e.g., "Resource Constraints: Inadequate classrooms and teaching aids")

3.10 Ethical Considerations

The researcher adhered to ethical standards approved by The Open University of Tanzania (Appendix VI). Participants signed informed consent forms (Appendix VI), outlining the study's purpose, voluntary participation, and withdrawal rights. The researcher ensured confidentiality by using pseudonyms (e.g., Teacher 1, WEO 1) and storing data securely on a password-protected laptop and encrypted cloud server (Google Drive with two-factor authentication). Data will be retained for five years (November 2024–November 2029), per university policy. After this, digital data will be permanently deleted using secure erasure software (Cleaner), and paper records will be shredded and disposed of via confidential waste services. These steps address the supervisor's request for detailed storage and disposal procedures.

3.11 Chapter Summary

This chapter has outlined the methodology for studying the fee-free education policy's impact in Tanganyika District, using a mixed-methods design with a sample of 397 stakeholders. Detailed sampling, data collection, and analysis procedures ensure transparency.

CHAPTER FOUR

PRESENTATION AND DISCUSSION OF THE FINDINGS

4.1 Introduction

This chapter presents and discusses the findings of this study on the impact of Tanzania's fee-free education policy on the quality of primary education in public primary schools in Tanganyika District, Katavi Region. The analysis is structured around three revised objectives: (1) to examine the effect of fee-free education on pupil enrollment, (2) to evaluate its impact on teaching and learning quality, and (3) to assess how resource-related barriers influence education quality under the policy. Using Bertalanffy's Systems Theory (1968), the researcher interpreted the findings as interactions within educational subsystems, in which changes in enrollment (input) affect teaching processes and resource availability (outputs and feedback loops). Findings are presented in six APA-formatted tables, followed by interpretations, comparing results with Chapter Two's literature, and highlighting contributions to rural education systems. The chapter begins with respondent characteristics, followed by results and discussions aligned with each objective.

4.2 General and Demographic Information

This section outlines the response rate and demographic characteristics to contextualise the findings.

4.2.1 Response Rate

A high response rate ensures data reliability and validity. Table 4.1 shows that the study achieved a 100% response rate from the 397 selected respondents.

Table 4.1: Response Rate (N = 397)

Category	Frequency	Percent
Total Sample Selected	397	100.0
Total Responses Received	397	100.0
Response Rate	397	100.0

Source: Field Data, 2024

The 100% response rate, rare in field research, reflects the effectiveness of the structured data collection process, including clear communication about voluntary participation and confidentiality. The policy's relevance to respondents' roles likely motivated full participation, minimising non-response bias. The researcher believes this strengthens the study's credibility, ensuring a comprehensive dataset for analysing the policy's impact in Tanganyika District.

4.2.2 Demographic Characteristics of Respondents

Table 4.2 summarises respondents' sex, age, education level, respondent type, and working experience.

Table 4.2: Demographic Characteristics of Respondents (N = 397)

Demographic Category	Category	Frequency	Percent
Sex	Male	218	55.0
	Female	179	45.0
Age	Below 20	204	51.4
	20–29	106	26.7
	30–39	48	12.1
	40–49	39	9.8
Education Level	Primary (Pupils)	327	82.4
	Certificate	38	9.6
	Diploma	24	6.0
	Degree and above	8	2.0
Respondent Type	District Education Officer	1	0.3
	Head Teachers	7	1.8
	Ward Education Officers	2	0.5
	Teachers	60	15.1
	Pupils	327	82.4
Working Experience (n = 70)	Less than 1 year	2	2.9
	1 to less than 5 years	30	42.9
	5 or more years	38	54.3

Source: Field Data, 2024

Table 4.2 reveals a balanced sex distribution (55% male, 45% female), ensuring diverse gender perspectives critical for assessing equity in access under the fee-free policy. The age distribution, with 51.4% below 20 (primarily pupils), aligns with the study's focus on primary education, while older respondents (20–49 years) provide professional insights into implementation and quality. Education levels show that 82.4% of pupils and 17.6% of educators (9.6% with certificates, 6.0% with diplomas, 2.0% with degrees) offer varied perspectives on teaching and learning processes. The respondent type breakdown, with 82.4% pupils and 15.1% teachers, emphasises classroom-level impacts, while officials (2.6%) provide administrative views.

Among educators (n = 70), 54.3% have over 5 years of experience, adding depth to their insights on systemic challenges. The researcher believes this diverse sample strengthens the study's ability to capture the policy's multifaceted effects, enabling a holistic analysis of subsystem interactions in Tanganyika District's rural education system.

4.3 Discussion of Findings

This section presents and discusses findings aligned with the revised objectives, using Systems Theory to structure arguments and interpret subsystem interactions.

4.3.1 Effect of Fee-Free Education on Pupil Enrollment

Systems Theory frames enrollment as an input subsystem influencing the education system's access component.

Table 4.3: Pupils' Enrollment after the Implementation of Fee-Free Education

Year	Boys Enrolled	Girls Enrolled	Total
2015	4,980	4,939	9,919
2016	5,540	5,879	11,419
2017	6,450	5,968	12,418
2018	6,775	6,543	13,318
2019	7,109	6,909	14,018
2020	8,407	7,981	16,388

Source: Field Data, 2024

Table 4.3 shows a 65% enrollment increase from 9,919 in 2015 to 16,388 in 2020, with boys' enrollment rising 68.8% (4,980 to 8,407) and girls' enrollment rising

61.6% (4,939 to 7,981). This balanced gender growth indicates the policy's success in removing financial barriers and enhancing access for both boys and girls in rural Katavi. Findings revealed a substantial enrollment increase from 9,919 in 2015 to 16,388 in 2020, with balanced growth for boys and girls, confirming enhanced access but straining resources. Teaching quality faced challenges, with increased resources and reduced dropouts failing to consistently improve education due to overcrowded classrooms, inadequate infrastructure, teacher shortages, insufficient funding, and limited community engagement. These barriers, analysed as feedback loops disrupting subsystem equilibrium, highlight rural-specific challenges in Katavi, contributing to Systems Theory by illustrating quality declines in underserved contexts. Recommendations include government investment in infrastructure, teacher recruitment, and professional development, as well as community initiatives to address indirect costs (e.g., uniforms, transportation). Future research should explore long-term academic outcomes, urban-rural differences, teacher coping strategies, and socio-economic impacts to ensure sustainable, high-quality education, aligning with the supervisor's call for clear, impactful presentation.

Table 4.4: Perceptions of Enrollment Changes Post Fee-Free Education (N = 387)

Response	Frequency	Percent
Significant increase	256	67.0
Slight increase	88	22.1
No change	28	7.1
Slight decrease	15	3.8
Total	387	100.0

Source: Field Data, 2024

Table 4.4 shows that 89.1% of respondents (67.0% significant, 22.1% slight) perceived increased enrollment, with only 3.8% reporting a slight decrease and 7.1% no change. This confirms the policy's broad impact on access. Qualitative insights reinforce this: the DEO stated:

> *"There has been a significant increase in pupil enrollment since the introduction of fee-free education. Many parents who previously could not afford school fees are now enrolling their children. (DEO, personal communication,* October 2024)

A WEO added:

> *"The increase is particularly evident in rural areas, where families prioritise basic needs over education costs. With fees removed, these families are more willing to send their children to school. (WEO 1, personal communication,* October 2024)

A head teacher noted:

> *"The policy has brought more girls into school, addressing gender gaps, but the surge has strained our resources. (Head Teacher 4, personal communication,* October 2024)

Through the lens of Systems Theory, the fee-free policy acts as an input that significantly enhances the access subsystem, as evidenced by the 65% enrollment increase (Table 4.3) and 89.1% stakeholder agreement (Table 4.4). This aligns with Glewwe et al.'s (2016) finding of a 20% increase in enrollment in Tanzania post-fee removal, supporting the theory's premise that inputs (policy changes) drive subsystem outputs (increased access). The researcher argues that the gender-balanced growth, particularly the 61.6% increase in girls' enrollment, challenges Colclough's

(2023) emphasis on persistent gender disparities in Sub-Saharan Africa, offering a new insight into rural Tanzania's progress toward equity.

However, unlike Barrera-Osorio et al.'s (2020) urban-focused study, which reported modest enrollment gains, this study's findings highlight the pronounced impact in rural Katavi, where financial barriers were a primary obstacle. This contributes to Systems Theory by illustrating how contextual factors (e.g., rural poverty) amplify input effects, creating stronger subsystem interactions. The head teacher's comment on resource strain foreshadows feedback loops, suggesting that increased enrollment inputs may disrupt other subsystems (e.g., infrastructure, teaching quality), as explored in subsequent sections. This finding extends Chapter Two's literature by emphasising the need for rural-specific policy adjustments to sustain access gains and by highlighting the interplay between access and resource subsystems in underserved regions like Tanganyika District.

4.3.2 Impact of Fee-Free Education on Teaching and Learning Quality

The second objective was to evaluate the impact of the fee-free education policy on the quality of teaching and learning in primary schools in the Katavi Region. This investigation aimed to determine whether the policy's implementation has significantly affected the effectiveness of educational delivery, focusing on factors such as teaching resources, teacher-student ratios, and overall learning outcomes. Systems Theory frames teaching and learning as process subsystems affected by enrollment inputs.

Table 4.5: Perceptions of Teaching and Learning Quality (N = 387)

Statement	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	Mean
Policy enabled more teaching resources	1.5 (6)	5.9 (23)	0.8 (3)	45.4 (177)	46.4 (181)	4.31
Policy reduced dropout rates	0.8 (3)	7.6 (29)	3.3 (13)	45.6 (176)	42.7 (165)	4.22
Policy increased education quality	17.1 (66)	29.0 (112)	1.0 (4)	41.3 (160)	11.6 (45)	3.01

Source: Field Data, 2024

Table 4.5 indicates strong agreement on resource improvements (92.6%, mean = 4.31) and reduced dropout rates (88.3%, mean = 4.22), but only 52.9% (mean = 3.01) believed the policy enhanced overall education quality, with 46.1% disagreeing. Qualitative insights provide context: a head teacher noted:

> *"We have more textbooks now, but with 70 pupils per class, individualized instruction is nearly impossible. (Head Teacher 3, personal communication, October 2024)*

The DEO added:

> *"Government support has increased resources, but overcrowding and teacher shortages limit quality gains. (DEO, personal communication,* October 2024)

A WEO commented:

> *"Reduced dropouts are a success, but the quality of teaching suffers when teachers are overwhelmed by large classes. (WEO 2, personal communication,* October 2024)

Systems Theory interprets these findings as process subsystem strain caused by increased enrollment inputs. The 92.6% agreement on resource improvements aligns with Kilonzo's (2020) findings in Kenya, where fee-free policies enhanced material availability through capitation grants. However, the low 52.9% agreement on quality improvement reflects disruptions in the teaching process, corroborating Muralidharan and Sundaravalli's (2013) evidence of teacher overload in high-enrollment contexts.

The researcher argues that the policy's success in reducing dropouts (88.3%) mirrors Mavhunga and Maponya's (2019) South African findings on retention gains among disadvantaged groups. Still, the quality decline (46.1% disagreement) contradicts Hanushek and Wimer's (2008) assertion that funding directly enhances quality. This discrepancy highlights a rural-specific challenge: while inputs (enrollment) and resources (textbooks) have increased, the process subsystem (teaching) is strained by inadequate teacher-pupil ratios and infrastructure. This study's findings extend Chapter Two's literature by emphasising that rural contexts like Katavi face unique process disruptions, contributing to Systems Theory by showing how feedback loops (e.g., overcrowding) undermine quality despite input gains. Unlike urban-focused studies (e.g., Barrera-Osorio et al., 2020), this study's analysis underscores the amplified impact of enrollment surges in rural areas, where baseline resources are limited, offering a novel perspective on sustaining quality in underserved regions.

4.3.3 Resource-Related Barriers Influencing Education Quality

This was the third objective: the study intended to assess the resource-related barriers influencing educational quality. The Systems Theory views these barriers as

feedback loops that disrupt subsystem equilibrium, affecting the quality output of the education system. The findings are summarized in Table 4.6.

Table 4.6: Perceptions of Resource-Related Barriers (N = 387)

Barrier	Very High (%)	High (%)	Neutral (%)	Low (%)	Very Low (%)	Mean
Overcrowded classrooms	51.8 (200)	47.2 (183)	1.0 (4)	0.0 (0)	0.0 (0)	4.51
Inadequate infrastructure	46.5 (180)	43.9 (170)	3.0 (12)	5.9 (23)	0.8 (3)	4.29
Teacher shortage	48.7 (188)	39.6 (153)	6.6 (26)	5.1 (20)	0.0 (0)	4.32
Inadequate funding	51.3 (198)	39.8 (154)	3.9 (15)	5.1 (20)	0.0 (0)	4.37
Limited community engagement	45.7 (177)	50.0 (193)	1.3 (5)	2.3 (9)	0.8 (3)	4.37

Source: Field Data, 2024

Table 4.6 shows significant agreement on resource-related barriers: 99% rated overcrowding as high/very high (mean = 4.51), 90.4% for inadequate infrastructure (mean = 4.29), 88.3% for teacher shortages (mean = 4.32), 91.1% for inadequate funding (mean = 4.37), and 95.7% for limited community engagement (mean = 4.37). Qualitative data provide depth: a WEO stated:

> *"Overcrowded classrooms and limited infrastructure make it hard to maintain quality teaching. Teachers are stretched thin, and facilities can't keep up with enrollment. (WEO 2, personal communication,* October 2024)

A head teacher added:

> *"Parents think free education means no involvement, reducing community support for schools. This affects resource*

> *mobilisation and pupil attendance. (Head Teacher 5, personal communication,* October 2024)

The DEO noted:

> *"Funding through capitation grants has increased, but it's insufficient to address the surge in pupils, leading to persistent quality challenges. (DEO, personal communication,* October 2024)

Systems Theory interprets these barriers as feedback loops in which increased enrollment (input) overwhelms resource subsystems, disrupting the quality of outputs. The near-unanimous concern about overcrowding (99%), high ratings for infrastructure (90.4%), and teacher shortages (88.3%) align with HakiElimu's (2020) findings on rural Tanzania's resource deficits, reinforcing the theory's emphasis on subsystem interdependence. The researcher argues that the significant concern about limited community engagement (95.7%) contradicts Mbilinyi et al.'s (2016) optimism about parental support in Tanzania, highlighting a rural-specific disengagement in Katavi.

These finding challenges Systems Theory's assumption of balanced feedback loops, as the lack of community involvement creates a negative feedback cycle that exacerbates resource constraints. Compared to Kremer et al.'s (2013) focus on cash transfers in Kenya, this study emphasises structural barriers (e.g., insufficient classrooms and teachers) over financial incentives, offering a new perspective on rural education challenges. Additionally, the 91.1% concern about funding aligns with Baird et al.'s (2015) argument that fee removal alone is insufficient without

sustained investment, particularly in rural areas where baseline resources are limited. This study's findings extend Chapter Two's literature by highlighting how indirect costs (e.g., uniforms, transportation) and community disengagement form feedback loops that undermine quality, contributing to Systems Theory by illustrating how external factors disrupt subsystem equilibrium in rural contexts. This suggests a need for holistic interventions, such as community sensitisation programs and increased government funding, to restore balance and ensure quality education.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter concludes the research by synthesising key insights into the impact of Tanzania's fee-free education policy on the quality of primary education in public primary schools in Tanganyika District, Katavi Region. Guided by Bertalanffy's Systems Theory (1968), it presents a comprehensive summary of the study's scope, methodology, and findings, draws conclusions based on the revised objectives, and offers actionable recommendations to enhance the policy's effectiveness and sustainability. The chapter also proposes directions for future research to deepen the understanding of fee-free education's implications in rural Tanzanian contexts.

5.2 Study Summary

This study investigated the impact of Tanzania's fee-free education policy, introduced in 2015, on primary education quality in Tanganyika District, Katavi Region, a rural area characterised by economic constraints and limited educational infrastructure. The research problem centred on whether the policy, aimed at improving access to education, has effectively enhanced enrollment and quality, or introduced systemic challenges that undermine its goals. Guided by three objectives (1) to examine the effect of fee-free education on pupil enrollment, (2) to evaluate its impact on teaching and learning quality, and (3) to assess how resource-related barriers influence education quality, the study employed a convergent parallel mixed-methods design. Data were collected from 397 respondents (327 pupils, 60 teachers, 7 head teachers, 2 Ward Education Officers (WEOs), and 1 District Education

Officer (DEO) using questionnaires and semi-structured interviews, as detailed in Chapter Three. Bertalanffy's Systems Theory framed the analysis, viewing enrollment as an input subsystem, teaching/learning as a process subsystem, and resource barriers as feedback loops affecting quality outputs.

Key findings revealed a 65% increase in enrollment from 9,919 in 2015 to 16,388 in 2020, with balanced growth among boys (68.8%) and girls (61.6%), confirming the policy's success in enhancing access (Objective 1). However, only 52.9% of respondents perceived improved teaching and learning quality, despite 92.6% acknowledging increased resources and 88.3% noting reduced dropouts, highlighting strains from overcrowding and teacher shortages (Objective 2). Resource-related barriers including overcrowding (99% high/very high), inadequate infrastructure (90.4%), teacher shortages (88.3%), insufficient funding (91.1%), and limited community engagement (95.7%) were identified as significant impediments to quality (Objective 3). These findings, analysed through Systems Theory, underscore the interplay of educational subsystems and rural-specific challenges, contributing new insights into balancing access and quality in underserved contexts.

5.3 Conclusions

Through the lens of Bertalanffy's Systems Theory (1968), this study concludes that Tanzania's fee-free education policy has significantly enhanced access to primary education in Tanganyika District, Katavi Region, by removing financial barriers, resulting in a substantial enrollment increase and balanced gender growth, demonstrating progress toward equity in rural settings; however, this input subsystem

success has strained resources and teaching processes, creating feedback loops that threaten sustainability.

Despite increased resource availability and reduced dropout rates, teaching and learning quality remain limited due to overcrowding and teacher shortages, reflecting disruptions to the process subsystems amplified by rural constraints. Resource-related barriers, such as overcrowding, inadequate infrastructure, teacher shortages, insufficient funding, and limited community engagement, severely hinder quality, highlighting systemic imbalances in underserved areas. These findings contribute to Systems Theory by illustrating how successful inputs disrupt subsystem equilibrium in resource-constrained rural contexts, underscoring the need for holistic strategies to address structural and social barriers and ensure sustainable, high-quality education.

5.4 Recommendations

To maximise the fee-free education policy's impact and ensure sustainable quality education in Tanganyika District, the following recommendations are proposed for policymakers, educators, and community stakeholders, addressing both immediate and long-term needs.

5.4.1 Policy Recommendations

i. The government should prioritise the construction of additional classrooms and upgrading of facilities, particularly in rural schools, to address overcrowding (99% concern) and inadequate infrastructure (90.4%). This aligns with Systems Theory's emphasis on balancing subsystems to maintain quality outputs.

ii. To mitigate teacher shortages (88.3% concern), the government should recruit more teachers and provide continuous professional development to equip them to teach in larger, more diverse classrooms. This strengthens the teaching process subsystem, ensuring quality delivery.

iii. The government should establish reliable funding mechanisms and increase capitation grants to address inadequate funding (91.1% concern). Collaborations with international organisations and the private sector can enhance resource availability, supporting subsystem equilibrium.

iv. Policymakers should implement sensitisation programs to address limited community engagement (95.7% concern), encouraging parental involvement in school activities and resource mobilisation. This reduces negative feedback loops, enhancing system sustainability.

5.4.2 Practical Recommendations

i. The government should introduce subsidies for uniforms, supplies, and transportation to alleviate indirect cost burdens, ensuring full pupil participation and reducing dropout risks, as noted by head teachers.

ii. Schools should establish community committees to support maintenance, fundraising, and pupil welfare, address limited community engagement, and foster local ownership of education.

iii. Prioritise rural infrastructure improvements, such as safe drinking water and electricity, to create conducive learning environments, addressing the 90.4% concern about inadequate facilities.

iv. Regular assessments of the policy's effects on access and quality should be conducted, using stakeholder feedback to adjust strategies and ensure subsystem balance.

5.4.3 Recommendations for Further Research

i. Future research should track pupils' academic progress over time to assess whether increased enrollment translates into improved learning outcomes, addressing the gap between access and quality.

ii. Studies should compare the policy's impact in urban and rural schools to identify context-specific challenges, particularly rural infrastructure deficits, and inform tailored interventions.

iii. Research should examine how teachers manage increased class sizes and resource constraints, and identify support needs to enhance teaching quality in rural settings.

iv. Investigate the broader socio-economic effects of the policy, focusing on indirect costs (e.g., uniforms, transportation), to develop strategies that ensure truly free education.

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APPENDICES

APPENDIX I QUESTIONNAIRE FOR TEACHERS

Dear Sir/Madam/Dr. /Prof.

I am Andrew William Edward, a Student at the Open University of Tanzania, undertaking Master's Degree in Administration, Planning and Policy Studies (M.ED. APPS). I am undertaking this study to investigate THE IMPACT OF FEE-FREE EDUCATION ON QUALITY EDUCATION IN PUBLIC PRIMARY SCHOOLS IN TANGANYIKA DISTRICT COUNCIL, KATAVI REGION. You have been selected as a respondent for this study, please I need you to give the correct information for your best level of understanding. All the information provided will be used for research purposes only and not otherwise and confidentiality is kept.

Part A: Respondent's Profile

1. Respondent's Sex

i) Male [ ]

ii) Female [ ]

2. Respondent's age

i) Below 20 [ ]

ii) 20-40 [ ]

iii) 41-60 [ ]

iii) Above 60 [ ]

3. Level of Education

i. Certificate [ ]

ii. Diploma [ ]

iii. Degree and above [ ]

Part B: Objective questions

Thank you for participating in this survey. This questionnaire aims to understand the impact of fee-free education on primary schools in Katavi Region. Your honest responses are important for this research.

Section 1: Enrolment after Fee-Free Education

Instructions: Please choose the answer that best reflects your experience.

1. Since the introduction of fee-free education, has there been a change in pupil enrolment at your school?

(a) Yes [ ] (b) No enrolment [ ]

2. How would you describe the change in pupil enrolment? (Choose only one)

(a) Significant increase [ ] (b) Slight increase [ ] (c) No change [ ]

(d) Slight decrease [ ] (e) Significant decrease [ ]

Section 2: Quality of Teaching and Learning

Instructions: Please rate your level of agreement with the following statements using the scale provided.

Statement	**Strongly Disagree (1)**	**Disagree (2)**	**Neutral (3)**	**Agree (4)**	**Strongly Agree (5)**
The availability of more pupils in classrooms due to fee-free education has created					
overcrowded classrooms, negatively affecting teaching					
The availability of free education has enabled schools to invest in additional teaching resources and materials, potentially enhancing the Quality of learning.					
The introduction of fee-free education has reduced the					

dropout rate in primary schools.					
Fee-free education has increased the quality of education in primary schools					

Section 3: School Attendance and Retention Rates

Instructions: Please choose the answer that best reflects your experience.

1. Since the introduction of fee-free education, have you observed any changes in pupil attendance rates at your school?

(a) Yes [ ] (b) No [ ]

2. How would you describe the resource related barriers influencing education quality?

Barrier	**Very high (1)**	**High (2)**	**Neutral (3)**	**Low (4)**	**Very low (5)**
Overcrowded classrooms					
Limited community engagement					
Inadequate infrastructure					
Teacher shortage					
Inadequate funding					

THANK YOU FOR PARTICIPATION

APPENDIX II DODOSO KWA MWANAFUNZI

Mwanafunzi Mpendwa,

Jina languni Andrew William Edward, mwanafunzi katika Chuo Kikuu Huria cha Tanzania (OUT), ninafanya Shahada ya Uzamili katika Uongozi, Upangaji na Sera za Elimu (M.ED. APPS). Ninasoma kuhusu Athari yaElimu Bure katika Utoaji waElimu Bora katika Shule za Msingiza Serikali katika Halmashauri yaWilaya ya Tanganyika, Mkoa wa Katavi. Umechaguliwa kushiriki katika utafiti huu, tafadhalini muhimu kutoataarifa sahihi kwa uwezo wako mkubwa wa kuelewa. Taarifa zote zitakazotolewa zitatumika kwaajili ya utafiti tunahazitatumika vinginevyo na usiri utahifadhiwa.

SehemuyaA: MaelezoyaMshiriki

1. Jinsia:

(a) Mume[ ]

(b) Mke[ ]

2. Umri:

(a) Chini ya miaka 7 [ ]

(b) Miaka 7-10 [ ]

(c) Miaka 11-14 [ ]

(d) Zaidi yamiaka 14 [ ]

3. Ngazi yaElimu: Drs la …….

Sehemu ya B: Maswali yaUtafiti

Asante kwa kushiriki katika utafiti huu. Maswali haya yana lenga kuelewa athari ya elimu bure katika shule za msingi Mkoa wa Katavi. Majibu yako ya kweli ni

muhimu sana katika utafiti huu.

1. Je kuna watoto wenye umri wako unao wa fahamu ambao hawasomi katika shule yoyote mtaani kwako?

a) Ndiyo [ ] b) Hapana [ ]

2. Kama jibu hapojuu ni ndiyo taja idadi ya watoto wasio soma unao wafahamu

……..……

3. Je ulishawahi kushindwa kuhudhuria shule kwa mchango wa aina yoyote katika shule yako?

a) Ndiyo [ ] b) Hapana [ ]

Onesha kukubaliana a u kutokukubaliana juu ya athari zifuatazo za elimu bure katika shule za msingi.

Kauli	Sikubaliani kabisa (1)	Sikubaliani (2)	Sijui (3)	Nakubaliana (4)	Nakubaliana sana (5)
Upatikanaji wa wanafunzi wengi zaidi katika madarasa kutokana na elimu bure umeleta msongamano, hivyo kupunguza ubora wa ufundishaji.					
Upatikanaji wa elimu bure umewezesha shule kuwekeza katika vifaa na rasilimali za ufundishaji, hivyo kuboresha ubora wa kujifunza.					
Kuanzishwa kwa elimu bure kumepunguza kiwango cha wanafunzi wanaoacha shule katika shule za msingi.					
Elimu bure imeongeza ubora wa elimu katika shule za msingi.					

2. Unaelezeaje vikwazo vinavyohusiana na rasilimalivinavyoathiri ubora wa elimu mkoani katavi?

Vikwazo vikubwa sana (1) Vikubwa (2) Wastani (3) Vidogo (4) Ndogo sana (5)

Vikwazo	**Vikubwa Sana**	**Vikubwa**	**Wastani**	**Vidogo**	**Ndogo sana**
Madarasa yenye msongamano mkubwa					
Ushirikiano mdogo wa Jamii					
Miundombinu duni					
Upungufu wa walimu					
Upungufu wa fedha za Kutosha					

ASANTE KWA USHIRIKIANO WAKO

APPENDIX III INTERVIEW GUIDE TO HEAD TEACHERS

I am Andrew William Edward, a student of the Open University of Tanzania, undertaking Master's Degree in Administration, Planning and Policy Studies (M.ED. APPS). I am undertaking this study to investigate THE IMPACT OF FEE-FREE EDUCATION ON QUALITY EDUCATION IN PUBLIC PRIMARY SCHOOLS IN TANGANYIKA DISTRICT COUNCIL, KATAVI REGION. You have been selected as a respondent for this study, please I need you to give the correct information for your best level of understanding. All the information provided will be used for research purposes only and not otherwise and confidentiality is kept.

Introduction

Thank you for taking the time to participate in this interview. This research aims to understand the impact of fee-free education on primary schools in Katavi Region. Your insights as a school leader are helpful.

Interview Questions:

i. Enrolment Trends (5 minutes)

1. Since the introduction of fee-free education, have you observed any changes in pupil enrolment at your school?

i. Can you describe the nature of the change (increase, decrease, or no change)?

ii. If there was an increase, do you have any insights into the reasons behind it?

ii. Quality of Teaching and Learning (10 minutes)

2. How has fee-free education impacted the quality of teaching and learning in your school?

i. Are there any challenges related to class sizes, teaching resources, or teacher workload?

ii. Conversely, have there been any positive developments in terms of teaching methods or resource availability?

iii. School Attendance and Retention Rates (10 minutes)

3. . How would you describe the resource related barriers influencing education quality

General Impact (5 minutes)

3. Overall, how would you characterise the impact of fee-free education on your school?

i. Are there any specific benefits or challenges that you would like to highlight?

Closing (5 minutes)

4. Is there anything else you would like to share about your experience with fee-free education and its impact on your school?

APPENDIX IV

INTERVIEW GUIDE TO WARD EDUCATION OFFICER

I am Andrew William Edward, a Student at the Open University of Tanzania, undertaking Master's Degree in Administration, Planning and Policy Studies (M.ED. APPS). I am undertaking this study to investigate THE IMPACT OF FEE-FREE EDUCATION ON QUALITY EDUCATION IN PUBLIC PRIMARY SCHOOLS IN TANGANYIKA DISTRICT COUNCIL, KATAVI REGION. You have been selected as a respondent for this study; please I need you to give the correct information for your best level of understanding. All the information provided will be used for research purposes only and not otherwise and confidentiality is kept.

Introduction

Thank you for taking the time to participate in this interview. This research aims to understand the impact of fee-free education on primary schools in Katavi Region. Your insights as a Ward Education Officer are helpful.

Interview Questions:

i. Enrolment Trends (5 minutes)

1. Since the introduction of fee-free education, have you observed any changes in pupil enrolment at your school?

iii. Can you describe the nature of the change (increase, decrease, or no change)?

iv. If there was an increase, do you have any insights into the reasons behind it?

ii. Quality of Teaching and Learning (10 minutes)

2. How has fee-free education impacted the quality of teaching and learning in your school?

iii. Are there any challenges related to class sizes, teaching resources, or teacher workload?

iv. Conversely, have there been any positive developments in terms of teaching methods or resource availability?

3. iii. How would you describe the resource related barriers influencing education quality?

(10 minutes)

General Impact (5 minutes)

3. Overall, how would you characterise the impact of fee-free education on your school?

ii. Are there any specific benefits or challenges that you would like to highlight?

Closing (5 minutes)

4. Is there anything else you would like to share about your experience with fee-free education and its impact on your school

APPENDIX V

INTERVIEW GUIDE TO DISTRICT EDUCATION OFFICER

I am Andrew William Edward, a student at the Open University of Tanzania, undertaking Master's Degree in Administration, Planning and Policy Studies (M.ED. APPS). I am undertaking this study to investigate THE IMPACT OF FEE-FREE EDUCATION ON QUALITY EDUCATION IN PUBLIC PRIMARY SCHOOLS IN TANGANYIKA DISTRICT COUNCIL, KATAVI REGION. You have been selected as a respondent for this study; please I need you to give the correct information for your best level of understanding. All the information provided will be used for research purposes only and not otherwise and confidentiality is kept.

Introduction

Thank you for taking the time to participate in this interview. This research aims to understand the impact of fee-free education on primary schools in Katavi Region. Your insights as a District Education Officer are helpful.

Interview Questions:

a) Enrolment Trends (5 minutes)

i. Since the introduction of fee-free education, have you observed any changes in pupil enrolment at your school?

ii. Can you describe the nature of the change (increase, decrease, or no change)?

iii. If there was an increase, do you have any insights into the reasons behind it?

b). Quality of Teaching and Learning (10 minutes)

i. How has fee-free education impacted the quality of teaching and learning in your school?

ii. Are there any challenges related to class sizes, teaching resources, or teacher workload?

iii. Conversely, have there been any positive developments in terms of teaching methods or resource availability?

c). School Attendance and Retention Rates (10 minutes)

d). . How would you describe the resource related barriers influencing education quality?

e). General Impact (5 minutes)

i. Overall, how would you characterise the impact of fee-free education on your school?

ii. Are there any specific benefits or challenges that you would like to highlight?

f). Closing (5 minutes)

i. Is there anything else you would like to share about your experience with fee-free education and its impact on your school?

APPENDIX VI: RESEARCH CLEARANCE LETTER

THE UNITED REPUBLIC OFTANZANIA

MINISTRY OF EDUCATION, SCIENCE

AND TECHNOLOGY

THE OPEN UNIVERSITY OF **TANZANIA**

Ref. No OUT/PG202186798 21"tNovember, 2024

District Executive Director (DED),

Tanganyika District Council, P.O. Box 01,

KATAVI

Dear Director,

RE: RESEARCH CLEARANCE FOR MR.ANDREW WILLIAM EDWARD, REG NO: PG202186798

2. The Open University of Tanzania was established by an Act of Parliament No. 17 of 1992, which became operational on the 1stMarch 1993 by public notice No.55 in the official Gazette. The Act was however replaced by the Open University of Tanzania Charter of 2005, which became operational on 1s January 2007.In line with the Charter, the Open University of Tanzania mission is to generate and apply knowledge through research.

3. To facilitate and to simplify research process therefore, the act empowers the Vice Chancellor of the Open University of Tanzania to issue research clearance, on behalf of the Government of Tanzania and Tanzania Commission for Science and

Technology, to both its staff and pupils who are doing research in Tanzania. With this brief background, the purpose of this letter is to introduce to you Mr. Andrew William Edward, Reg.No:PG202186798), pursuing **Masters of Education in Administration** Planning and Policy Studies (MEDAPPS). We here by grant this clearance to conduct a research titled "The Impact of Fee-Free Education on Quality Education in Public Primary Schools in Tanganyika District Council, Katavi Region. He will collect his data at your area from 22ndNovember 2024 to 30^{h}December 2024.

4. In case you need any further information, kindly do not hesitate to contact the Deputy Vice Chancellor (Academic) of the Open University of Tanzania, P.O. Box 23409, Dar es Salaam. Tel: 022-2-2668820.We lastly thank you in advance for your assumed cooperation and facilitation of this research academic activities.

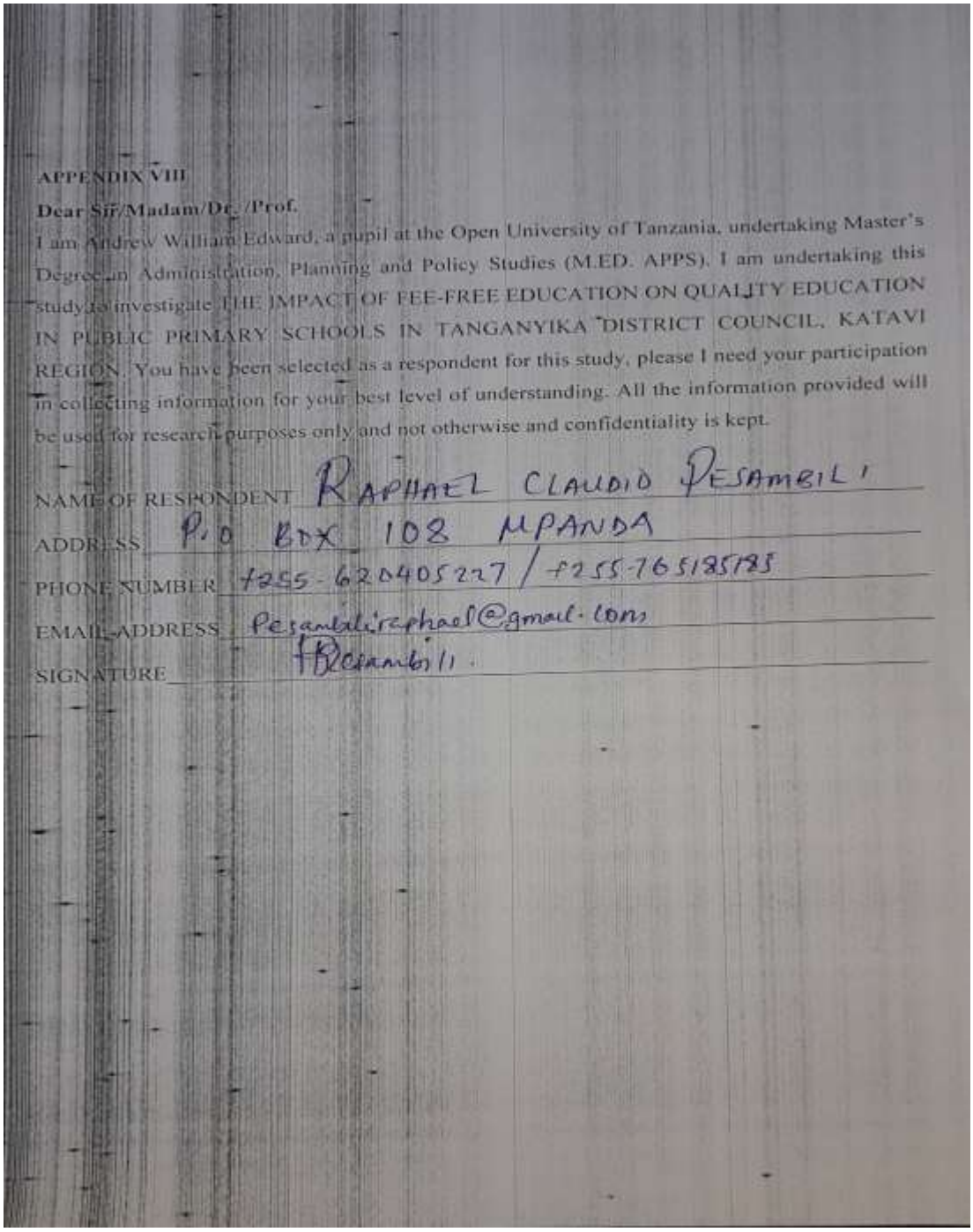
Yours sincerely,

THE OPEN UNIVERSITY OF TANZANIA

Prof. GwahuIa Raphael Kimamala

VICE CHANCELLOR

Appendix VII: Research Consent Form



APPENDIX VIII

Dear Sir/Madam/Dr. /Prof.

I am Andrew William Edward, a pupil at the Open University of Tanzania, undertaking Master's Degree in Administration, Planning and Policy Studies (M.ED. APPS). I am undertaking this study to investigate THE IMPACT OF FEE-FREE EDUCATION ON QUALITY EDUCATION IN PUBLIC PRIMARY SCHOOLS IN TANGANYIKA DISTRICT COUNCIL, KATAVI REGION. You have been selected as a respondent for this study, please I need your participation in collecting information for your best level of understanding. All the information provided will be used for research purposes only and not otherwise and confidentiality is kept.

NAME OF RESPONDENT RAPHAEL CLAUDIO PESAMBILI

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SIGNATURE RPesambili.