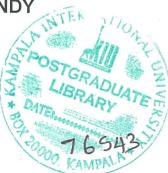
# IMPLEMENTATION OF THE UNIVERSAL PRIMARY EDUCATION POLICY AND ITS EFFECTIVENESS IN TANZANIA

BY GIDEON R. BENJAMIN. MAPPP/0484/61/DF TEL 0712546686 +255784720376

A RESEARCH SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF THE MASTER DEGREE OF ARTS IN PUBLIC POLICY AND PLANNING OF KAMPALA INTERNATIONAL UNIVERSITY.

> LB1607 B4681 2007

SUPERVISOR Rev.Dr. MATTATTICAL NINAN CHANDY September 27, 2007



## DECLARATION

I, Mr. Gideon Rwegoshora Benjamin, do hereby declare that, the work presented here in this thesis is my original work, except where acknowledged, and it has never been submitted or examined in any University as an academic requirement for any award.

Signed

B

Gideon Rwegoshora Benjamin. MAPPP/0484/61/DF

Date

## APPROVAL

This research book by Gideon R. Benjamin entitled "Implementation of Universal Primary Education Policy and its Effectiveness in Tanzania" is submitted with my approval to the School of Post Graduate Studies (SPGS).

Rev. Dr. Mattattical Ninan Chandy

Kampala International University

Sign: Date: -

#### DEDICATION

This research is dedicated to my beloved father, Benjamin M Kato and mother, Felista Kahindi, for whose love, extreme tolerance, honesty, integrity and deep understanding has been invaluable for me being at Kampala International University.

#### ACKNOWLEDGMENTS

I am truly grateful to all the people who have helped me in getting this research thesis together. I am most grateful to my lecturer, Rev. Dr. Mattattical Ninan Chandy, who has been my supervisor. I could not have asked for a better supervisor.

I would also like to thank my lecturer, Dr. Lameck Kibikyo for his encouragement. My thanks extend to Prof. Samuel Owolabi (the Director of School of Postgraduate Studies), Prof. Opio, Dr. Alex Ijjo, Dr Otanga Rusoke and Mr. Muhammad Sewaya. I am grateful for all their encouragement.

I am grateful to the staff of the Ministry of Education and Culture, research centre of the University of Dar es Salaam and the all Non Governmental Organisations, for the use of their resource centres; without which research would never have been carried out.

I would like to express my deepest gratitude to my parents and other member of my family for their constant encouragement and support during the course and without whose invaluable support, both materially and morally, my endeavors would have been fruitless.

My thanks also go to all my respondents who volunteered to fill in the questionnaires and those who opted for face to face discussion on the topic. My lecturers in the School of Post Graduate Studies and Research, and my course mates in general for providing a good and enabling environment to complete the course. My relatives who prayed for me and tolerated any inconveniences I have caused to them in one way or another, contributed enornomoursly to my academic success.

I am most grateful to Salma Mussa who offered words of wisdom and encouragement. Your kind gestures will always be remembered. I would also like to appreciate all the support offered by my sisters Oliva, Belina, Irene and Jack. I am truly indebted to their moral support throughout.

In the same vein, I would like to express my deepest gratitude to my closest friends Mr. Duncan Matundura, Emanuel Ruba Gail, Ismail Said and Francisco Mwizamholya who were my nearest persons to turn to whenever I stumbled in the process of doing my work and in acquiring whatever materials that will assist to make my work a success.

Lastly but not least, I thank my entire family, all my brothers and sisters, but most especially my father and mother, for giving all that I ever needed throughout my education. May the almighty God reward their effort abundantly. God bless you all

#### TABLE OF CONTENTS

DECLARATIONi
APPROVAL ii
DEDICATION III
ACKNOWLEDGMENTSiv
ABSTRACTix
ACRONYMSx
CHAPTER ONE
INTRODUCTION
1.0 Background of the Study
1.2 Structure of the Public Schooling System in Tanzania
1.3 The Main Providers of Education at Different Levels
1.4 Primary Education
1.5 Current Status and Recent Trends
1.6 Statement of the Problem
1.7 General Objective of the Study7
1.8 Research Questions
1.9 Operational Definition of Terms
1.10 Significance of the Study9
1.11 Scope of the Study
CHAPTER TWO 11
LITERATURE REVIEW
2.1 Summary of Literature Review
2.2 Conceptual Framework
CHAPTER THREE:
RESEARCH METHODOLOGY
3.1 Description of the Population from which the Sample was selected23

3.2 Description of the Sampling Method and the Sample Size
3.4 Research Instruments
3.5 Data Collection Procedure
3.6 Data Analysis
3.6.1 Qualitative data analysis
3.7 Validity and reliability of the Questionnaire
3.8 Limitations of the study
CHAPTER FOUR
DATA PRESENTATION, ANALYSIS AND INTERPRETATION
4.1. Research Question 1: what has been the efficiency and effectiveness of the UPE
policy in Tanzania in terms of enrollment to primary education?
4.2 Research Question 2: what has been the efficiency and effectiveness of the UPE
policy in Tanzania in terms of internal efficiency to primary education?
4.3 Research Question 3: what has been the efficiency and effectiveness of the UPE
policy in Tanzania in terms of marginalized groups such as female and
disadvantaged children in gross enrollment ratio to primary education?40
4.4 Summary of Results/Findings43
CHAPTER FIVE
DISCUSSION, CONCLUSION AND RECOMMENDATIONS
5.0 Discussion of Results44
5.1 Determination of the efficiency and effect of UPE policy in Tanzania on the
enrollment in primary education44
5.2 The efficiency and effect of UPE policy in Tanzania on internal efficiency45
5.3 The efficiency and effect of UPE policy in marginalized groups such as female and
disadvantaged children47
5.4 Policy Implications and Conclusion
5. 5 Policy Recommendations
5.6 Summary of recommendations
5.7 Recommended topics for future researchers in Tanzania

REFERENCES	58
APPENDIX A: Age and gender of respondents APPENDEX B: Questionnaire to different stakeholders in Educational sector	
QUESTIONNAIRE.	63
APPENDIX C: Map of Tanzania	
APPENDIX D: Quality control- Content Validity Index	
APPENDIX E: Quality control- Reliability Coefficient Index	
APPENDIX F: Sample size required for the given population size	

#### ABSTRACT

The study is concerned with the implementation of the Universal Primary Education policy and its effectiveness in Tanzania. The study articulates an indepth understanding of the current status of the policy and the critical constraints on its effectiveness. This study will contribute to the ongoing discussion between the government and the different stakeholders toward the articulation of the effectiveness implementation of the policy. This study was conducted through a cross - sectional survey because it crosses between different key stakeholders in educational sector. The study was concerned with the implementation of UPE policy and its effectiveness in Tanzania. It was specifically intended to investigate the effectiveness of the UPE policy on the enrollment, the effect of the UPE policy on the female and disadvantaged children in gross enrollment ratio and the effect of the UPE policy on internal efficiency in terms of primary education in Tanzania. These questions were best investigated through surveys research designs. Sample population of this study was selected from different key stakeholders in educational sector which include some personnel from the Ministry of Education and Culture, different researchers from University of Dar es Salaam and different Non-Governmental Organisations. In this research the researcher made questionnaire that consisted of four parts. That is, the information on the profile of the respondents as in terms of age, gender and experience in this policy. It also contained the information relating to the knowledge of the respondents in terms of the UPE policy as pertaining to its effectiveness and lastly, contained information regarding the status of the policy. Personal observation on the effectiveness of the UPE policy is another instrument used in collection of data. The major findings of this study is that the allocation of funds in this policy is not according to fund needed to make it more effective by providing all the necessary materials required such as textbooks, classrooms and quality teaching staffs and the researcher also observed that UPE programme is just creating a class between the rich and the poor who depend only on this policy because the rich take their children to good schools and get quality education compared to these children of poor people. The major recommendation of the study is that, the government should start to act introspectively putting in the mind the pupils after completion of primary seven by either establishing the Vocational or Technical Training to accommodate those who could not get the chance to go to Secondary Education. The government should also improve parent awareness in the importance of giving their children basic education because without this the removal of school fees is nothing.

## ACRONYMS

A-level	Advanced level
BES	Basic Education Statistics
CCG	Classroom Completion Grant
CEF	Community Education Fund
CPTCs	Core Primary Teacher Training Colleges
CSEE	Certificate of Secondary Education Examination
CVI	Content validity Index
DEOs	District Education Officers
DG	Development Grant
DR	Drop out rate
EFA	Education for All.
EIC	The Equity in the Classroom
ESDP	Education Sector Development Programme
ESR	Education for Self Reliance.
ESR	Education for Self-Reliance
GEI	Global Education Index
GER	Gross Enrolment Ratio.
GIS	Geographic Information Survey
GNP	Gross National Product
GPI	Gender Parity Index
LGAs	Local Government Administration
MDGs	Millennium Development Goals.
MoEC	Ministry of Education and Culture
NBS	National Bureau of Statistics
NECTA	Tanzania National Examination council
NER	Net enrolment ratio
NPSLE	National Primary School Leaving Examination
O-level	Ordinary Level
PEDP	Primary Education Development Plan.
PRSP	Poverty Reduction Strategy Paper

,

PRSP	Poverty Reduction Strategy Paper
PRSP	Public Service Reform Programme
SAP	Structural Adjustment Policies.
SES	Socio-Economic Status
SFG	School Facility Grant
SSA	Sub-Saharan Africa
STD1	Standard One
STDVII	Standard Seven
TCs	Teachers Colleges
TPR	Teacher-Pupil Ratio
TzPPA	Tanzania Participatory Poverty Assessment
UPE	Universal Primary Education.

# CHAPTER ONE INTRODUCTION.

#### 1.0 Background of the Study.

Tanzania development theory and practice are geared towards combating ignorance, disease and poverty. Investment in human capital and provision of education has been recognised as central to quality life. Provision of Education and literacy for all, the cornerstone for quality life, has been recognised at the national policy level. This is in accordance with the United Nations Declaration on Basic Human Rights and the Jomtien Declaration of 1990. (Aide-Memoire, 2006) Evidently, Tanzania recorded very impressive expansionary education policies and reforms during the 1970s. However, the goal to achieve Universal Primary Education (UPE) remains a chimera. The Jomtien objective of achieving Basic Education for all in 2000 has equally remained elusive. The forces against achievement of UPE are many and complex. However, a holistic approach to the problem of education provision and financing may provide us with the quickest positive results.

Achievement of UPE is part and parcel of the collective national philosophy. In this regard, one can identify three phases in Tanzania's political thinking which are intimately connected with UPE. The first phase, 1967 to 1980s, is associated with Socialism and Self-Reliance. UPE was part and parcel of the social economic transformation. This phase, usually associated with Mwalimu Nyerere, saw phenomenal growth in enrolments into primary schools. It was a phase which also answered to the call of education for all in a poor country committed to equitable and fair provision of education to all. However, this 'success story' was fractured with internal and external structural weaknesses. (Ministry of Education and Culture, 2004)

Implementation of UPE during this era received very little attention from international donor agencies. The Tanzanian government was the sole provider of social services. The organisation and implementation of UPE were channeled

through centrally directed development plans. This resulted into significant access to primary education. This was evidenced by high enrolment rates and rising intake rates but sadly low internal efficiency.

The second phase period, 1980s to 1990s, can best be described as the period of 'the growth of a new economic collective national thought'. This phase was characterised by newly introduced liberal ideas of free choice, market oriented schooling and cost efficiency. Expansion of UPE (including other national priorities) featured prominently. However, the economy was not able to sustain their provision. This is the period usually associated with structural adjustment policies.

Structural Adjustment Policies (SAP) and programmes in vogue during mid 1980s had a highly pronounced adverse effect on UPE. This has been demonstrated by falling enrolment rates, low intake rates and high internal inefficiency.

The third phase government, spanning the period 1995 and after is the era of 'income and non-income poverty collective thought'. The collective national thought is attempting to address the future of (i) a donor dependency syndrome and a defeatist developmental mindset; (ii) a weak and low capacity for education management; (iii) failures in good governance in the organisation and implementation of UPE, and (iv) an ineffective implementation syndrome. This commitment is exemplified by abolition of fees and household contributions. This has resulted into positive signs on access and participation rates.

## 1.2 Structure of the Public Schooling System in Tanzania

At Independence, Tanzania adopted a philosophy of education that would best serve a country united in national purpose. It was felt that in addition to imparting market skills to the labour force, a national education system should always aim at removing social injustices and disparities, and also prepare and re-orient the

youth to realise and to practice the best norms and values of society. Consistent with this role of education, a key political conviction of the government is that every Tanzanian has an inalienable right to basic education (Government of Tanzania, 1970).

Since Independence, the government has formulated various educational policies and programmes such as; the establishment of a public educational system with national curricula, a national teaching service, and a national examination and certification body. The government also established national schools and national training institutions as well as special educational programmes to meet various development needs. The key current components of the national education system are:

The school system is a 2-7-4-2-3+ consisting of pre-primary, primary school, ordinary level secondary education, Advanced level secondary, Technical and Higher Education. Primary School Education is compulsory whereby parents are supposed to take their children to school for enrollment.

# 1.3 The Main Providers of Education at Different Levels

Education and Training in Tanzania is undertaken by several Ministries, NGOs, communities and individuals. The ministries responsible include that of Education and Culture, Regional Administration and Local Government, Science, Technology and Higher Education and the Ministry of Education, Zanzibar. The establishment, management and administration of primary schools are the responsibility of the Ministry of Regional Administration and Local Government and the Ministry of Education and the Ministry of Education and the Ministry of Education and Local Government and the Ministry of Education and Local Government and the Ministry of Education and Local Government and the Ministry of Education Zanzibar.

#### 1.4 Primary Education

The government considers primary education as the most 'general' of all educational skills and also a basic human right that should be provided to all Tanzanians. The expected minimum years of schooling are 7 years. General work skills begin to be imparted to children at this level. The specific objectives of

primary education are stated in Sessional Paper No. 6 of 1970 on *Education and Manpower Development for the Next Decade and Beyond* (Government of Tanzania, 1970). These include: To impart literacy, numeracy and manipulative skills; to develop self–expression and utilization of the senses; to develop a measure of logical thought and critical judgment and to lay foundation for further education. Primary education is also tailored to develop awareness and understanding of the environment; to develop the whole person including the physical, mental and spiritual capacities; to appreciate and respect the dignity of labour and to develop positive attitude and values towards the society.

However, Primary education suffered a number of problems in the 1990. These included declining enrolments, declining quality, declining completion rates and increased drop out rates. However, in recent times these problems are being addressed and positive results have already been registered. The MOEC has instituted a Community Education fund which addresses issues of access, persistence performance, community ownership planning and management of resources. To improve the micro planning at the school and district levels the MOEC has established the Whole School Development Programme (WSDP).

#### 1.5 Current Status and Recent Trends

Provision of Education in Tanzania is guided by the Education and Training Policy, Higher Education Policy, Technical Education Policy and Education Policy Zanzibar.

The major issues addressed by the policies include access equity, quality cost sharing to mention a few. Strategies to implement the policies so as to improve delivery of Educations at various levels are in place.

There is a decline in enrollment rates of 7 year olds in primary schools. On average 12.5% of the 7-year-olds are in schools. According to Basic Statistics in Education (1998) about 3 million school age children are not in school. The situation can partially be attributed to parents' perceptions of the maturity age for children to start school; the need for child labour, school capacity, as well as the general lack of awareness on the importance of education coupled with the rising costs of education.

Higher dropout rates among enrolled children (girls dropping out more than boys). Only 65.3 of the enrolled children complete primary cycle. Unfavorable environment including dilapidated school buildings, unmotivated and poorly trained teachers, poor management of schools contribute to high dropout.

Declining quality of schools: Quality is low in terms of inputs: training of teachers, physical environment, teaching/learning materials, supervision and assessment. Quality is low in terms of processes: relation between school and community, school management, classroom instruction, curriculum and planning.

Quality is low in terms of outputs: Over 80% of pupils entering Primary School Leaving Examinations (PSLE) score less than 50%. Lack of reporting system and low transition rates to secondary schools (only 19.1% of pupils who completed primary education in 2002 precede to public secondary schools).

#### 1.6 Statement of the Problem

The importance of providing UPE in Tanzania and other less developed countries of the peripheral has never been disputed. The question is how? It is not the mere initial enthusiasm for expansion of primary education and achieving quantity in the short run, which matters. Rather, the Government must consider the long-run implications of UPE efforts as related to cost-effectiveness of investments as well as the commitment to achieve, the institutional arrangement, capacity, competence and developmental mind-set. And given the limited resources and low or weak institutional capacity available difficult decisions have to be made regarding trade-offs between investments that promote school quality relative to choices that expand school network and enrolments. In the pursuit of an effective holistic approach to UPE several factors may contribute to the sustainability of UPE achievements. The demands made on the educational system and its institutions are increasingly numerous and complex. On the one hand, the resources made available to these institutions and their managers are proportionately fewer. Such resources have usually been secured under conditions of cost effectiveness. Government, on the other hand, has to reduce public expenditure while still pursuing equity goals. Educational management and administration has to play a key role in resolving some of the problems which emerge in this climate of unlimited demands with limited resources with which to implement the desired UPE programme.

This situation is made worse by the reduced external efficiency of education and general lack of relevance to people's lives and work. Yet, the problems of implementation and sustained provision of UPE, such as the lack of a quality teaching force, the un-availability of textbooks and other learning materials, low nutritional status of children and overcrowded classrooms militate against positive achievement as a characteristic of the ineffective implementation syndrome.

The contingent supportive internal and external environment is a pre-condition to achieving UPE and therefore necessitating contingency strategies. Internally given the regional and districts' diversity the partnership net has to be cast wide by promoting local capacity or competence policy reforms on empowerment, autonomy, pluralism, decentralisation, equalisation and stimulation. Externally, debt-relief and its management through structural adjustments and the general globalisation processes must be managed properly so that they can work for the poor in the provision of goods and services, UPE inclusive.

Within the system, the most critical problems are related to a constellation of factors that support the quality of teaching and learning processes in the classroom. Many pupils learn in crowded, poorly furnished and unfinished

classrooms, and often have, to share scarce textbooks. Many teachers are poorly qualified and poorly deployed, but in any case often are trying to do a good job with a minimum of basic resources.

The curriculum is often seen as too diverse and in some ways irrelevant for many of the pupils and their life needs. Many teachers, head teachers and other education support staff are also poorly prepared for the management and quality assurance tasks demanded of their roles, but also often are trying to work to the best of their ability in isolated and under-resourced contexts.

#### 1.7 General Objective of the Study

The main purpose of this research is to assess the conceptual institutional development and sustainability of Tanzanian government in their efforts to improve the basic knowledge and skill's base through the provision of quality primary education to all children, particularly since the beginning of the EFA movement in 1990.

# 1.8 Specific Objectives of the Study

- Determining the efficiency and effectiveness of UPE policy in Tanzania on the enrollment in primary education.
- Assessing the efficiency and effectiveness of UPE policy in Tanzania on internal efficiency of primary education in Tanzania.
- Assessing the efficiency and effectiveness of UPE policy in Tanzania on marginalized groups such as the female and disadvantaged children in gross enrollment ratio in primary education.

#### 1.8 Research Questions

- What has been the efficiency and effectiveness of the UPE policy in Tanzania in terms of enrollment to primary education?
- What has been the efficiency and effectiveness of the UPE policy in Tanzania in terms of internal efficiency to primary education?

 What has been the efficiency and effectiveness of the UPE policy in Tanzania in terms of marginalized groups such as female and disadvantaged children in gross enrollment ratio to primary education?

# 1.9 Operational Definition of Terms

Universal primary education in this report is defined as the provision by a country of sufficient primary school places to enroll all of its eligible primary school-age population.

UPE is also used in this report to refer to a set of policy reforms that were introduced to achieve the objective of UPE and that were instrumental in bringing about large-scale primary school expansion, which led to primary GERs of over 100 per cent soon after the pronouncements. When UPE reforms were introduced is relatively easy to define in Tanzania where policy statements introducing changes in primary education and the subsequent enrolment responses to these changes are easy to date. In Tanzania, UPE reforms began in the 2002 school year.

**Policy** is a form of a governing principle, plan, or course of action or is pattern of action by government officials rather than their separate discrete decisions not only the enactment of a law but the decision relating to its implementation and enforcement and the feedback from part of the policy.

**School quality** will refer to those characteristics of schools and programs which influence school learning outcomes which includes performance in examinations, completion rate.

Learning outcomes refer to the basic knowledge and skills expected of primary education completers. It could also refer to non-academic outcomes such as employment, productivity, and contribution to the community, but these are beyond the scope of the current evaluation.

**Population**: The population for this study comprised Tanzanians between 7 and 60 years old. The data on population is obtained from the National Bureau of Statistics (NBS) which projects it from census data.

**Illiteracy** is inability to read, write and count; restricts the ability to follow signposts, understand medicine labels and machinery instructions, confirm commercial transactions, avoid being cheated, etc. Literacy skills provide a way out of the poverty trap in which many people find themselves.

#### 1.10 Significance of the Study

This study analyses the implementation of the UPE policy and its effectiveness in Tanzania.

This study is important because it highlights the setbacks of implementing UPE policy in a developing Country like Tanzania and therefore promises a lot of lessons for other Countries with similar characteristics. It is hoped that this study will yield information that will be useful for proper planning and decision making in the Ministry of Education and Culture in order to solve the problems that Ministry is facing in implementing this policy.

The findings and the recommendations of the study should also be useful to other researchers, Non-Governmental Organisations and Parents in relation to implementation of the UPE policy and its effectiveness. Henceforth, they will not rely on haphazard personal experiences, or subjective expert judgments or on cultural diversity, but base their decisions and actions on concrete knowledge of the UPE policy supported by research findings. This will help to improve the implementation of the UPE policy and its effectiveness in the Country. The researcher also hopes that the study will form a basis for further research on the implementation of the UPE policy and its effectiveness in general. This should lead to the generation of new ideas for the better and effective UPE policy in Tanzania and the rest of the World and Africa in particular

#### 1.11 Scope of the Study

The study priority included, inter alia, the effectiveness of implementation of the UPE policy in Tanzania that was introduced in 2002 by the former President Hon. Benjamin William Mkapa. This study focused especially enrolment expansion for both girls and boys focussing on classroom construction, teacher engagement, and teacher deployment; quality improvement, encompassing in-service and preservice teacher training, and teaching and learning materials provision; and system-wide management improvements, through a range of capacity building efforts including economic sustainability of the policy.

#### **CHAPTER TWO**

#### LITERATURE REVIEW

# 2.0 The related literature on the implementation of UPE policy and its effectiveness

The Government of Tanzania launched the UPE policy in 2002 to give equal opportunities to all the school age children regardless of any status be it geographical position, urban or rural, high or low socio economic status, sex, religion or ethnicity.

UPE sustainability remains a question: Under what circumstances will UPE be sustainable, and who has responsibility for those circumstances? Innovative solutions are needed, such as bringing back retired teachers or adding day care centers to schools so that young mothers can attend classes. Continued commitment from the government and development partners in both policy and financing remains key to UPE sustainability. (Roger Avenstrup, Xiaoyan Liang and Søren Nellemann, 2003: 7)

According to Galabawa, (1999:25), the achievement of the UPE programme is part and parcel of the collective national philosophy. In this regard, the main challenge to UPE is whether or not it could be sustained. He further states that the adverse economic trends have reduced government's capacity to finance social services. The proportion of public expenditure on education has been dismal. High levels of debt servicing continued to haunt economic performance. The changing country population and macro-demographic trends and dynamics have continued to exert pressure on UPE.

The UPE programme in Tanzania, which was actually built on the philosophy of **"Ujamaa"** and the Education for Self-Reliance (ESR) reforms, had a good chance of succeeding. The ESR philosophy had addressed some relevant novel ideas of relevance of education, egalitarianism, practicality and elimination of elitism. However, the fact that the UPE programme was accompanied by high and rapid growth in enrolment rates for a few years which later levelled off; and

then fell need exploration so as to provide a contribution to the overall issue of Education for All; and, an agenda of the Government and development communities or agencies. (Kuleana, 1999)

Sub-Saharan African (SSA) countries have experienced slow progress in achieving universal primary education (UPE) in the last three decades, of which Tanzania is one. Between 1980 and 1995, SSA was the only region that experienced a decline in the average gross enrollment rate (GER) for primary education, while other regions experienced substantial increases (UNESCO, 1998). Public expenditure on primary education also fell by six percent in per capita terms between 1985 and 1995, while it increased approximately threefold in all other developing regions (UNESCO, 1998). International aid agencies and researchers share a common concern that SSA will not achieve UPE by 2015, unless the progress is to be accelerated rapidly (Carceles, 2001; Bennell, 2002).

Responding to this concern, many SSA governments have abolished school fees for public primary education, under the name of the UPE or Free Primary Education policy (Avenstrup, et al., 2004). The UPE policy has been well received by various stakeholders including politicians, aid agencies, and the beneficiaries as a pro-poor policy. Tanzania is among the countries which adopted the UPE policy in 2002 and experienced a robust increase of primary enrollment from 2.8 million in 1997 to 7.6 million in 2004 (UNESCO, 2000; MOES, 2005). The evidence of its actual effect is mixed. While studies indicate that the UPE policy effectively increased access to primary education for children of poor families by removing tuition for public primary education (Deininger, 2003), others reveal that various fees are still charged under the UPE policy (Suzuki, 2002). For instance, a governmental report shows that 55 percent of primary dropouts left school due to the costs of schooling (MOES, 2003). These existing studies, however, conducted research a few years after the implementation of UPE, and there have been no empirical study in recent years. Since the aim of the UPE policy was primarily to increase the overall educational

attainments of children, it is important to examine the impacts of the UPE policy beyond school enrollment.

Internationally, there is a considerable body of literature on the usage and meaning of the terms, quality, efficiency, and effectiveness of education (Adams, 1993; Fuller, 1987; Lockheed & Hanushek, 1988; Makau, 1986; Motala, 1993; World Bank, 1988). These terms have become increasingly popular in discourse about developing education in less industrialised countries. What is clear is that, the terms "quality of education," "school quality," "school efficiency" and "school effectiveness" are often used interchangeably and associated with students' levels of academic (cognitive) performance in examinations. If achievement by students is low as manifested in a school's low test score in national examinations, for example the school is purported to be of low quality and, therefore, inefficient. Such a school would also be considered as not increasing students' ability to contribute to the overall development of their society, and hence not effective. "The Quality of Education in Developing Countries" confesses, "I make no pretence that the terms will always be used in exactly the same sense" (Beeby, 1966:14).

In Tanzania, like most African countries, while over 90% of recurrent expenditure goes to teachers' salaries, resources spent in instructional materials, such as textbooks, are minimal. Besides, pupil-teacher ratios show great inefficiency because low pupil-teacher ratios imply that more teachers are used to service relatively few pupils. Studies have shown that low income countries could save resources and improve learning by increasing pupil-teacher ratios. They would thereby use fewer teachers and employ the saved resources to buy inputs, such as text-books, that improve achievement (Wolff, 1984). However, the number of teachers in most African countries has increased by 24% between 1985 and 1990, while the enrolment ratio declined by 3% (Donors to African Education, 1994).

Galabawa argues that UPE drive was implemented without a well-thought out strategy for allocation of investment. The process of transferring the investment management function of primary education to local control was not effectively followed through. One is saying that a progressive UPE achieving investment strategy would take consideration of two approaches, namely, to adjust the flow of funds to the recipient districts and to ensure that allocations are made in accordance with regional needs. (Galabawa, J.C.J: 2003).

At a World Bank donor conference in 1989 Galabawa argued that more community involvement and cost sharing is essential to avoid fiscal crises. Recognising a need to reallocate more of Government's resources to benefit low income groups, he recommended reallocating funds from tertiary and secondary education to primary education, establish special grants for the poorest districts, and "transfer the burden of financing to those groups that benefit most through the use of fees" (Galabawa 1991:48).

Omari (1999) concludes that educational financing in Tanzania is highly regressive favouring the rich households and communes. Not only is there an increasing number of children who are in local elite private schools or studying in neighbouring countries, but there is an alarming disparity in quality among public schools. In Dar es Salaam you can move from "middle class elite public schools, with clean and well fed children in neat uniforms well provided classrooms with windows and doors, a full complement of lively teachers, and organized school environment" to "dusty, windowless and door less schools, with empty classrooms and malnourished children" (Omari 1999:97).

Furthermore, the study found three main reasons why parents do not enroll their children in school or allow them to drop out: (1) low level and unreliability of household incomes; (2) the significant contribution of school-age children to household income; and (3) traditional values which are biased against the education of girls. "This is contrary to the assumption that parents do not enroll

their children in school simply because they regard the quality of education to be poor. Thus it is unlikely that school enrolment can be improved simply by improving the quality of schools" (Mpango and Mushi 1998).

In an article on access and equity in basic education in Tanzania, Malekela and Ndeki (2001) mention the issue of fees but are not able to assess the importance of this factor beyond the statement: "Although no studies have been done, it would seem the majority of those who drop out come from low socio-economic status (SES) as parents of these children need their children's labour and often fail to pay for the school expenses" (Malekela and Ndeki 2001:127). They report low enrolment and high drop out in areas where child labour is in demand, such as in mining and sisal plantations.

The study by Maarifa Ni Ufunguo (2001) was conducted in Kilimanjaro Region, rightly recognised as the better off region in Tanzania, but one which has been suffering badly from the slump in the global coffee market. The report concludes that cost sharing "is not working in terms of generating the funding at community level required to provide an even adequate quality of education neither is cost sharing working in terms of accountability" (Maarifa Ni Ufunguo 2001:57). There is a need to consider the whole range of costs incurred by parents as direct fees, a better understanding of indirect costs, and how problems with collection, management, and accountability for money generate confusion at local level, undermining confidence in the overall system, the report argues. It supports the decision to remove the UPE fee and calls for a "clear strategy ... of how to finance the gap which will be left", but offers no recommendation to what this would involve.

It is of interest also to look at a study published after the removal of school fees, such as the Tanzania Participatory Poverty Assessment, and how it explains the response "of the many of the parents who immediately enrolled their children in school as soon as the main burden of fees was removed in January 2002"

(TzPPA 2003:10). The study implicitly endorses the argument that costs to parents of schooling prevented children from being educated, but offers no concrete evidence. Rather, the study concludes that it is very hard to disaggregate responses to education by livelihood group and describes three patterns emerging.

The study found: "Where the pull of the home, community, and a different set of values, often towards informal education, is strong, rejecting poor quality schooling is more likely" (TzPPA 2003:21). This is a combination of two arguments. On the one hand there are large groups in Tanzania that still do not value "modern" education. With Government not strictly enforcing compulsory primary education, as was the case in the 1980s and 1990s, parents simply had other priorities for their kids, whether they could afford school expenses or not. The other argument relates to the quality of the school environment. This pattern confirms findings in previous studies (TADREG 1993) showing widespread disillusionment among parents with declining quality. The response of some parents, notably the educated elite, has been private alternatives, while others simply accepted low attendance, truancy and drop out.

And the third pattern is: "Where parents have never seen the benefits of education, they are less likely to prioritise it for their children" (TzPPA 2003:21). The study consistently refers to virtuous circles of livelihood improvement and vicious circles of increased vulnerability, and the danger of widening the gap between the two. Education has the power of reversing the direction of the circle; it is surmised, but how to solve the Catch 22 situation implicit in the pattern above: low education results in low education? Compulsory schooling is one element of the strategy, but how to ensure benefits of education for the many? The system of financing education is obviously a critical factor, but again researchers are vague in terms of recommendations.

Mosha (2001) is concerned that Tanzania now increases its public debt to finance primary education. He also holds the view that there is no need for a blanket removal of fees, since there are quite a number of able parents, while he advocated a need to focus more on the quality of education and those already in the schools. "We should focus more on output data, not just enrolment".

There are a number of significant factors that kept children out of school (Malekela:2001) and school fees are not among them: poor school environment; economic depression and opportunity costs to child labour; lowly qualified teachers; and poor educational outputs after seven years with extremely few opportunities to enter secondary education.

A general argument is that poor families decide not to send children to school because the opportunity costs of child labour are too high. Children are needed in agriculture and livestock keeping, housekeeping and supporting elderly and ailing family members, and income generation through petty trade. Some argue that this situation remains unchanged. Where we have seen a change is in the perceived usefulness of schools, much influenced by the strong opening of private secondary schools coupled with a greater political commitment to education among national and local political leaders (Galabawa, 2003). It follows from this that an increasing number of families are willing to invest in education. Galabawa is concerned with the longer term financial sustainability of the basic education system. Rather than a blanket removal of school fees, one should have tried a voucher system for the poor, handled by local government. At least about 60% were paying the fees, and could afford to continue paying. In other words, Galabawa challenges the mainstream view that schools fees have been a major deterrent on enrolment; and vice versa, that the removal of the fees explains the rapid increase in 2002/2003.

Semboja (2003) also stated he was not aware of any serious studies on the effects of cost sharing in primary education, noting that school fees are a small

portion of cost sharing. There is no hard evidence documenting inability to pay, and press reports cannot be relied upon as evidence. "Why then make the UPE fee a culprit?" Sustainability, according to Semboja, does not arise in budgetary terms in the short run, since very little was actually collected, but is an issue in another sense. Investment per child has to go up to ensure quality. Parental contributions or other forms of local taxation would be essential to achieve this increase. He also reiterated the view that deepening aid dependency in primary education is a highly problematic. "What will happen when donors withdraw?"

Galabawa (2003) claimed that they had been arguing against blanket removal and were shocked by the sudden decision. "How are we going to sustain the input to education? Why does the Bank want this? They do not promote self reliance." On the other hand, it is also symptomatic for the role of research in Tanzania that a leading expert like Galabawa was never called upon by MoEC to assist in negotiations with the World Bank.

# 2.1 Summary of Literature Review

The first objective or question to be investigated is the effect of UPE policy on the enrollment in terms of primary education in Tanzania.

The evolution of enrolment in Tanzania suggests that the Government's objective of achieving Universal Primary Education is threatened by the declining enrolment ratios. The enrolment numbers in primary education, though showing an upward trend have remained low relative to the primary school-age population. (This can be seen in chapter four on data presentation and interpretation) And as with primary education, enrolment numbers in secondary schools are comparatively small relative to the output of pre primary and primary schools leavers. Secondary education continues to be treated as a residual.

The non-schooling gap is widening as is the capacity of the system to absorb all children seeking primary education. The low gross enrolment ratios at primary schools, which appear to stagnate at 7%, indicate a very low probability of an

attending primary schooling among Tanzanian children. Secondary education provision has essentially remained elitist and catering for a select few at a gross enrolment ratio of 17% in 2006 as compared to a ratio of Sub-Saharan Africa (SSA). Tanzania's provision of primary education is at a level that is only one quarter of that for the region as in whole.

By 2000, gross enrollment had plummeted to 77%. Cohort studies showed that less than half of all Tanzanian children were completing primary education, with the poor being the most excluded. The quality of education, never too good in the first place, deteriorated further to one of the lowest levels in the world. Efforts to reform education seemed only to produce mountains of papers written by technical consultants with no real difference on the ground.

That is why UPE policy, announced in late 2001 and implemented beginning 2002, has brought about real change and hope. In one of the most important policy decisions of our times, all primary school fees and mandatory contributions were abolished to ensure that no one would be left out because of inability to pay. Its effect was immediate. In 2002, enrollment in Standard One reached 1.6 million, up from 1.1 million in the previous year. Gross enrollment shot up to just over 100% in a single year. Over 16,000 classrooms were built with the help of development grants and community labour. About 7,000 new teachers were recruited. The reform process involving Government, donors and NGOs seemed to finally be on track. UPE policy is cause for celebration. The Government deserves clear commendation for it.

The second objective or question to be investigated was the effect of UPE policy on the internal efficiency in terms of primary education in Tanzania.

The internal efficiency index for primary education is 0.56, a figure which compares unfavorably with the Sub-Saharan Africa average of 0.88. Figures for grade-specific enrolment ratios indicate that in quantitative terms the differences in education opportunities are widening over time and across schooling levels. In

particular, at grade seven almost 50% of the relevant cohort of grade 7 schoolgoing age children are not in school.

The average teacher-pupil ratio (TPR) in primary school is 1:39.8 a figure lower than the targeted optimal level of 1:45. There are wide variations in efficiency levels across regions, district, and locations. Average primary school class size varies us from 31 to 55 compared to the target of 45. At secondary school level the GER is only 7.4% with the lowest primary to secondary transition rate in SSA. Average class size is 17 compared to the required 32 while the TSR ranges between 1:26 in 1996 to 1:19 in 1999. The wide variations in efficiency levels signify a need to rationalise present capacity through teacher audit exercises and institutional rationalisation.

A number of factors contribute to student achievement. The importance of parents' attitudes to education on the part of local communities is an important factor in organizing for school performance. In localities where schools work well and achieve good results, parents and the local community in general are strongly supportive of school, including giving considerable financial resources. In localities where the schools have poor facilities the reverse situation is true; there is often little community support translated into problems of absenteeism and high dropout rates.

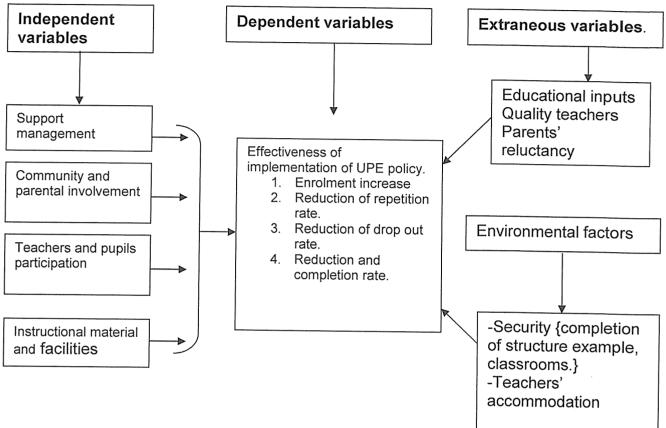
UPE can have both positive and negative impacts on repetition. Although UPE may have reduced the number of dropouts, it may also have encouraged low-score students, who would drop out of school without UPE, to repeat grades. To investigate the impacts of UPE on repetition, we also would like to identify the pre- and post-UPE cohorts. However, we only have repetition information on children aged 18 and younger. Some of them are still in primary school, or others who are not in school currently may go back to school later. Thus, it is still premature to investigate the issues of repetition. Nonetheless, our data show that the internal inefficiency, which is partly caused by repetition, is persistent. When

looking at GER and NER by grade, we note that the proportion of children of the grade-aged children in each grade gradually reduces and becomes less than 10 percent at the seventh grade in primary school for both boys and girls. More than half of our sample pupils have repeated the same grade at least once in primary education, and about a quarter of the pupils have repeated at least twice. Thus, it seems that primary education is still suffering from internal inefficiency under UPE.

The third objective or question to be investigated was the effect of UPE policy on the marginalized groups such as female and disadvantaged children in gross enrollment ratio in primary education. The UPE policy aims at expanding access, enhancing equity, and increasing efficiency in education systems. The government faces a particular challenge in providing quality basic education to marginalized populations such as the poor, ethnic minorities, orphans and sometimes girls.

UPE is highly appreciated by community members and most especially by the 'poor', the marginalised groups (including women, children, disabled, orphans, widows, youth, etc.), local leaders and key service providers because of improvements in access, equity and quality of the marginalized groups. Altogether, community members gave ten reasons for their strong appreciation of UPE. These are: increased access and enrolment especially of girls, disabled and the very poor; improvements in school physical facilities; improved teacher motivation; higher savings for secondary education due to reduced household expenditure on primary education; improved 'quality'; improved household hygiene; improved community discipline; reduced child labour; reduced incidence of early marriages; and establishment of more private schools. However, UPE was most deeply appreciated because of two major reasons. 'UPE has helped to acquire textbooks and furniture, including desks'. Most significantly, UPE has led to increased access and enrollment especially for the very poor: Formerly some of poor children used to rear goats while others used to remain at home helping

their parents to work in order to have some money to care for the family, but now they all go to school'



#### 2.2 Conceptual Framework

#### Source: Literatures

# Figure 1. Conceptual Diagram of the effectiveness of the UPE Policy

The diagram below is a conceptual model illustrating the link between effectiveness and the efficiency of the UPE policy. It is conceptualized that effectiveness of the UPE policy in Tanzania depends on a number of inputs that affect the effectiveness and efficiency of the policy. It is argued that the intervention processes (management or government support, parents' involvement, teachers and pupils participation and instructional materials) in the context of reform at the level of primary schools will lead to the effectiveness of the policy. It is also postulated that these processes will determine the outcome (greater efficiency) and consequently, the anticipated impact.

#### CHAPTER THREE:

#### **RESEARCH METHODOLOGY.**

#### 3.0 Research Design

This study was conducted through a cross – sectional survey because it crosses between different key stakeholders in educational sector. The study was concerned with the implementation of UPE policy and its effectiveness in Tanzania. It was specifically intended to investigate the effect of UPE policy on the enrollment, the effect of UPE policy on the female and disadvantaged children in gross enrollment ratio and the effect of UPE policy on internal efficiency of primary education in Tanzania. These questions were best investigated through surveys research designs.

### 3.1 Description of the Population from which the Sample was selected

Sample population of this study was selected from different key stakeholders in educational sector which include some personnel from the Ministry of Education and Culture, different researchers from University of Dar es Salaam and different Non-Governmental Organisations.

#### 3.2 Description of the Sampling Method and the Sample Size

The sample size of this study consisted of different key stakeholders in educational sector. These were the personnel of the Ministry of Education and culture who were selected purposively because the researcher could only get the information required through these personnel and no where else. And Research Centres and Non-Governmental Organisations which were selected by using simple random technique that gave equal chances to the respondents of being selected as a sample from the same population. The sample size used in this study is two hundred (200) which was selected out of four hundred and fifty five (455) respondents.

#### 3.4 Research Instruments

In this research the researcher made questionnaire that consisted of four parts. That is, the information on the profile of the respondents as in terms of age, gender and experience in this policy. It also contained the information relating to the knowledge of the respondents in terms of the UPE policy as pertaining to its effectiveness and lastly, contained information regarding to the status of the policy. Personal observation on the effectiveness of the UPE policy is another instrument used in collection of data.

A structured questionnaire consisting of a combination of both open and closedended types of questions was developed in order to allow for uniformity and consistency throughout the data collection process. However, few questions were semi-structured to accommodate flexibility of the responses from the respondents.

The effectiveness and efficiency of UPE policy level was based on the Likert's scale. Some questions required a scale of 1 to 5 and the measurement unit depended on the issue addressed.

Questionnaires developed by other countries such as Uganda, Kenya and other neighbouring countries on similar issues were used as references for this study. It was necessary to adapt relevant questions from those sources so as to enable some comparisons between Tanzania and those neighbouring countries to be made regarding the effectiveness and efficiency of implementation of UPE policy. The final draft of the questionnaire was approved and accepted by the supervisor of this study.

#### 3.5 Data Collection Procedure

The researcher used questionnaires, document analysis and observation. These instruments were used as the main tools for collecting data. The selection of these tools has been guided by the nature of data to be collected, the time

available as well as by the objectives of the study. The overall aim of this study was to assess the effectiveness of UPE policy in Tanzania. The researcher was mainly concerned with views, opinions, perceptions, feelings and attitudes of different key stakeholders in educational sector. As mentioned earlier this information was mainly collected through the use of questionnaire and observation techniques. Document analysis technique was also used to obtain data on the effectiveness of UPE policy.

The researcher intended to use semi-structured instruments. These enabled the researcher to balance between the quantity and quality of data collected. On the other hand, it provided more information. This delicate balance between the quality and quantity of information was useful for a fuller explanation of the phenomenon under investigation.

Questionnaires were used since the study was concerned mainly with variables that couldn't be directly observed such as views, opinions, perceptions and feelings of the respondents. Such information was best collected through questionnaires. Also given the time constraints, the researcher found the use of questionnaire as the ideal tool for collecting data. Since the targeted population was largely literate and unlikely to have difficulties responding to questionnaire items

The usefulness of a questionnaire is often referred to as its utility. The utility of a questionnaire is defined as the value or cost of using the questionnaire to identify the attribute, state, quality or event we want to identify. There is more than one way to identify a state, event, attribute or quality. Some methods require less effort or fewer resources than others. The idea is to use surveys and questionnaire with high utility is one where the cost of identifying an attribute or quality is low and the cost of being wrong is not high. Another term for utility is the "usefulness" of an instrument, although "usefulness" does not have the precise definition of "utility" within the field of statistics.

#### 3.6 Data Analysis

## 3.6.1 Qualitative data analysis

Qualitative data was analyzed manually as the study was on progress while in the field through observations based on the areas of interest. Thereafter the data collected was paraphrased and the researcher carried out literature review so as to cross check similarities in findings.

Reliable estimates of many of the indicators described here required reliable estimates of particular age groups of the population. These age groups varied from single age groups, such as the official starting age or the expected age at completion of primary, assuming a pupil completed primary in the officially allotted time, or they could have been for a group, such as the official primary school age group. Reliable estimates of these population groups were problematic for a number of reasons.

Usually estimates of population begin with censuses, which are typically conducted every 10 years. In Tanzania such estimates may be updated with vital registers during non-census years. However, vital registers are often not maintained in developing countries. In their absence, projections must be used during non-census years. Developing countries may use a number of methods to make such projections.

## 3.7 Validity and reliability of the Questionnaire.

The reliability of any questionnaire is defined as the consistency with which the same results are achieved. Practically speaking that means a person completing the questionnaire would produce the same responses and results if he or she completed the questionnaire a second time. The reliability of a questionnaire depends on the questionnaire and the person answering the questions.

The validity of a questionnaire relies first and foremost on reliability. If the questionnaire cannot be shown to be reliable, there is no discussion of validity.

But, demonstrating validity is easy, compared to reliability. Validity and reliability are related in such a manner that a validity instrument is reliable but not vice verse.

Content validity Index (CVI) of questionnaire focuses on the extent to which the extent of the instrument correspond to the theoretical content as is designed to measure. Content validity refers to the degree to which the text actually measures the traits for which it was designed; this is extent of implementation of UPE policy. This was subjected to CVI computation.

The content validity of the questionnaire is 0.94 as calculated by Rev. Dr. Chandy Ninan Mattattical as shown in Appendix D. Therefore the questionnaire was valid to be administered. This was acceptable as the least value (0.7) for survey studies for quality control (Amin, 2005).

The split half reliability or sub divided test was also used to further ascertain the coefficient of internal consistency. The test scores are split into two subsets, placing odd numbered items in one subset and even items in one set. The scores of the two subsets are then computed for each individual using the Pearson Product Moment Formula. The reliability coefficient obtained was 0.96 hence the researchers instrument was reliable as shown in Appendix E

#### 3.8 Limitations of the study

For ideal comparison, the study should have been conducted in many regions of Tanzania which are the part of UPE policy across the country. However, the selected UPE schools were identifying due to a number of contradictions such as funds, materials and time resources: the researcher had to meet the cost of the study with about 18 weeks to develop a proposal, investigate the problems and submit the report.

It would have been ideal if the whole of TANZANIA could be included in the research as the responses would provide a more reliable indicator of the level of

understanding of UPE amongst Tanzanians. However, time, cost and resources were the limiting factors. Hence, an alternative strategy involving the stratification of only one region of the country i.e. DAR-EL-SALAAM being represented by both it's urban and rural characteristics. The selection of both urban and rural areas of the region was based on purposive considerations. The region considered was purely for sampling purposes though analyses by the whole country would be more meaningful than by region analyses.

Another limitation was fear amongst members to discuss freely matters affecting them. UPE being a big policy, most respondents would not like to jeopardize their jobs by giving the correct information thus minimizing the chances of obtaining quality primary data.

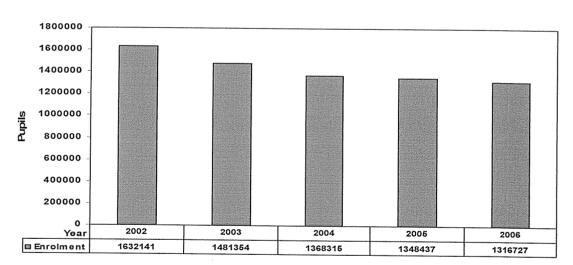
Some superiors were reluctant to accept filling the questionnaires.

#### **CHAPTER FOUR**

## DATA PRESENTATION, ANALYSIS AND INTERPRETATION

# 4.1. Research Question 1: what has been the efficiency and effectiveness of the UPE policy in Tanzania in terms of enrollment to primary education?

The effect of UPE policy on the enrollment in primary education was that, at national level there was an increase in enrollment beyond target in the first year 2002. This may be interpreted in two ways: firstly, in some council most school-going-age children were absorbed in the first wave of enrollment and secondly, in some places School-going-age children may not be enrolled. After 2002 when the policy was introduced then the following years the enrollment dropped as depicted on the table 3 and figure 3 below.



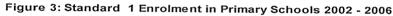
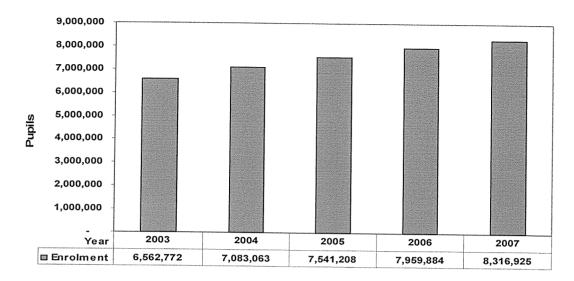


Figure 3b below shows the other hand of enrollment in primary schools that an average increase in enrolment since 2003 to be 438,538 students being 6.7% per annum but even though, absolute increase is declining by an average of 54,417 students per annum. Or at 10.4% per annum.

Figure 3b: Standard I - VII Enrolment in Primary Schools, 2003- 2007



In 2002, there were also very large increases in enrolments in Standard II (up 38%) and Standard III (up 27%). Total enrolment in primary schools rose to 5.98 million, an increase of 22.5%, a significant achievement. 8.5% (140,000) children who enrolled in Std 1 in 2002 dropped out before reaching Std 2.

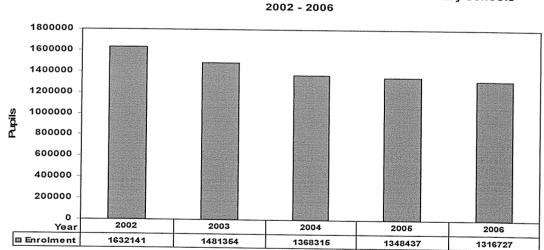


Figure 4: Standard two, three and four Enrolment in Primary Schools 2002 - 2006

In 2003, enrolments continued to rise well in Standards II (up 31%), III (up 27%) and IV (up 25%). Enrolments in Standards V, VI, and VII did not participate in this increasing trend, achieving together fewer enrolments in 2003 than in 2002 (down 1.8%). Total enrolment in primary schools rose to 6.56 million, an increase

of 9.7%, and well above (10% higher than) the projection given in the UPE document of 5.94 million. This was a continuation of the previous trend since total enrolments in primary schools had been increasing steadily since 1985, although at slower rates of increase.

YEAR	GRADE	GRADE II	GRADE III	GRADE IV	GRADE V	GRADE	GRADE	TOTAL	POP. 7-	GER
		11		1 V		VI	VII	TOTAL	13	
2004	1368315	1398033	1409864	1093989	747123	529709	536030	7083063	6665347	106.3
2005	1301265	1321564	1349520	1398693	955505	719886	511200	7557633	6861466	110.1
2006	1233553	1256427	1276287	1365913	1221640	920846	693646	7968312	7063362	112.8
2007	1166737	1184893	1213147	1296219	1249366	1218756	887478	8216596	7271198	113.0
2008	1197459	1126536	1144410	1231863	1133956	1205484	1174442	8214150	7485150	109.1
2009	1232569	1152727	1087732	1162850	1077389	1094624	1163136	7971027	7705398	103.4
2010	1319478	1233994	1154077	1131272	965610	946354	1098831	7849616	7932126	99.0
2011	1383752	1321118	1235528	1191850	1047224	963689	945349	8088510	8165526	99.1
2012	1419676	1349832	1287963	1241249	1074427	1017337	936478	8326962	8405793	99.1
2013	1452085	1380290	1312520	1289726	1115308	1040574	985151	8575654	8653130	99.1
2014	1502831	1428447	1357896	1258345	1172587	1092883	1019723	8832712	8907745	99.2
2015	1540439	1464257	1391788	1359666	1133508	1137990	1060644	9088292	9169852	99.1

## Table 3: Projection of Total Grade I - VII Enrolment by Grade 2004 - 2015

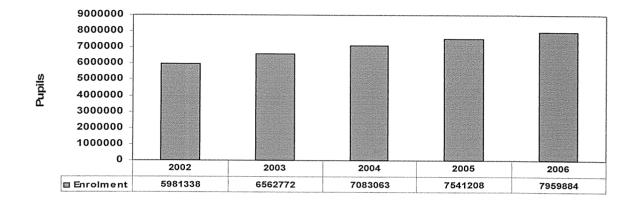


Figure 5: Standard I - VII Enrolment in Primary Schools, 2002 - 2006

However, the data from the figure 5 shows that the number of pupils enrolled from standard one up to seven from 2002- 2006 has been on the increase year after year which is different to the number of pupils enrolled in standard one alone which seem to decrease after 2002. This may be the result of the number of pupils who repeated in higher classes.

Yea	7yrs population		Enrolled			7yrs not enrolled			% not enrolled			
r							-					
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boy	Girl	Tota
										s	s	1
200	58856	52943	106800	48918	47961	968796	4938	49822	49206	9.17	9.41	9.29
2	4	8	2	0	6		4					
200	53494	53549	107044	47289	46877	941678	6204	66417	12876	11.6	12.4	12.0
3	3	8	1	9	9		4		3		6	3
200	53040	51647	104688	96460	46196	926305	6579	15478	12057	12.4	10.6	11.5
4	4	6	0	9	9		5	0	5	0	1	3
200	68008	66835	134843	56904	45696	102600	6598	17437	83421	12.8	11.4	10.8
5	7	0	7	5	0	5	7			5	2	5
200	66689	64983	136727	50876	50435	101311	6685	18034	84978	13.4	11.5	13.2
6	0	7		5	4	9	4			0	8	0

Table 4: year old enrollments in relation to population census

This table shows that the policy strategy has not been successful and targets have not been achieved. Large numbers of 7 year olds are not enrolled in

standard I with the large number of 7 year old children who remain out of school having increased between 2002 and 2003 although it has declined in 2004 to a level of 11.52%. Enrollment differs between boys and girls. Whereas the proportions of boys not enrolled have been increasing since 2002 to 2003, this is, from 9.17% to 12.4% in 2004 the situation is different on the part of girls. For the girls, there was a rise between 2002 and 2003 but thereafter in 2004 the non-enrollment fell to 11.52%. However there is no significant difference between the number of boys and girls who remain out of school. Every year more than 100,000 children aged 7 fail to enroll in standard I. although the population of 7 year old children enrolled in standard I is decreasing, there are still older children enrolling. This is shown in figure 6 below.

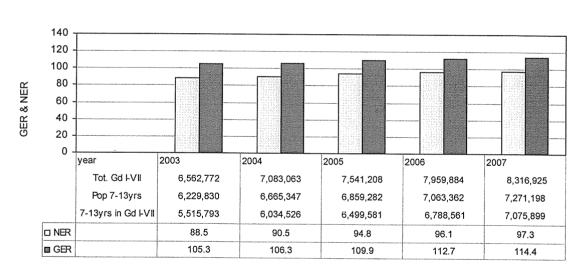


Figure 6: Total Enrolment, Population (7-13) years and Enrolment Ratios (GER and NER) in Primary Schools, 2003 - 2007

Since the implementation of the policy, both Gross Enrollment Ratio (GER) and Net Enrollment Ratio (NER) have arisen significantly. However, as the data reveals, there are 630,821 children between the ages of 7-13 who are not in School.

Year	Total grade 1-V11	Pop 7-13 years	7-13yrs in grade 1-V11	NER	GER
2002	5972077	6054257	4884385	80.7	98.6
2003	6562772	6229830	5515793	88.5	105.3
2004	7083063	6665347	6034526	90.5	106.3
2005	7557633	6861466	7476650	93.6	110.1
2006	7368312	7063362	7959884	95.0	112.8

 Table 5: Net and Gross Enrollment percentages

The data shows that UPE policy has reduced the delayed enrollment by 24.3 percentage points for girls and 25.8 percentage points for boys. They also show that orphans and children in female-headed households are more prone to delay enrollment. In contrast, children in Muslim households, children with educated parents, and children in high expenditure households are less likely to delay enrollment. We note that the education level of mothers seems to have a large impact on preventing delayed enrollment for both girls and boys, and that boys in female-headed households are more likely to delay enrollment. In short, socio-economic factors influence delayed enrollment in primary school, and the UPE policy is not sufficient to eliminate delayed enrollment by itself.

Year	Target	Actual	Recruited as % of	Total n <u>o</u>	No of	TPR
			target	of teachers	pupil	
2002	9047	7030	77.7	112109	5960368	11.53
2003	11651	10872	93.3	114660	6531769	11.57
2004	10563	14423	136.3	119773	7083063	11.59
2005	11506	15359	120.6	125432	7454145	11.55
2006	10450	13458	128.5	126573	7498632	11.52

**Table 6: Teacher recruitment** 

Data from the table reveals that efforts to recruit new teachers had an impact. However, the rate of enrollment is outstripping the recruitment of teachers. Teacher Pupil Ratio has risen from 1:46 in 2001 to 1:59 in 2004. Given that UPE policy require a teacher pupil ratio of 1:45, means that an additional 37628 teachers still need to be recruited, and more than the total recruited for the past 3 years of the UPE policy. Total enrollment in primary school increased by 22.4% in 2002, 9.6% in 2003 and by 7.8% in 2004. Although the rate of increase in enrollment is slowing down, it is likely that enrollment will increase at least by 5% in 2005 requiring an additional 7800 teachers. Unless urgent measures are taken to address the issue of teacher's recruitment, teachers' shortage are likely to seriously affect quality of learning in schools.

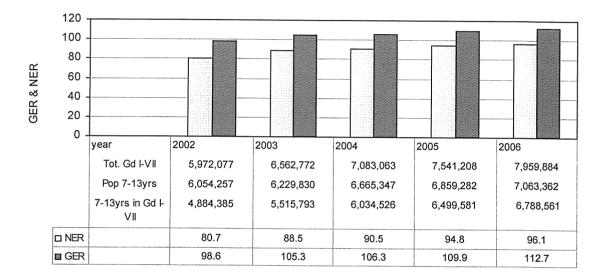


Figure 8: Total Enrolment, Population (7-13) years and Enrolment Ratios (GER and NER) in Primary Schools, 2002 - 2006

#### **Overall assessment**

Enrollment has been progressing well but the fact that the population census indicates a large number of school age children (7 year old) not enrolled is a cause for concern.

Overall, the response to putting up classrooms has been very positive. However, construction of classrooms has not matched requirements and many schools are without adequate number of desks, pit latrines, water tanks and teachers' houses.

The slow rate of teachers' recruitment is a matter of concern. Teacher recruitment is not keeping pace with enrollment leading to higher teacher pupil ratio. The researcher was also concerned about how planning for expansion is being undertaken and upon what date the Department of Planning is basing its recruitment targets. A simple projection model is required; one which will allow planners to vary figures in order to see what the impact will be.

## 4.2 Research Question 2: what has been the efficiency and effectiveness of the UPE policy in Tanzania in terms of internal efficiency to primary education?

In this connection, although some data on rates of completion, dropout, and repetition are available at the national level, it is difficult to get such rates at the individual school levels. This is because the Ministry of Education and Culture does not officially support repetition. We, therefore, used secondary data from the ministry and the Central Bureau of Statistics to analyse the children's participation in primary schools in Tanzania.

According to data from a sample of about 8,000 schools which participated in a survey carried out by the Ministry of Education and culture, drop-out rates in primary schools by regions were estimated. Coastal regions had the highest drop-out rate of 9.4% followed by Northern regions 8.0%, Eastern regions 6.5%, Southern regions 5.8% and Central regions 5.6% the national average drop-out rate is given as 5.4% (5.5% for boys and 5.3% for girls). There are many reasons for these dropouts some are illness, parent or guardian illness and also lack of school needs.

	50000										
	45000										
8	40000	-									
peoto	35000	-					· · ·				
E	30000					Π		· · · · · · · · · · · · · · · · · · ·			
L pisto	25000		1. 1. 1. 1. 					-			
Ē.	20000										
	15000										
	10000						1			-	-
	5000			-							
	0							ЪЛ			
Truancy		2003	%	2004	%	2005	%	2006	%	2007	%
Pregnancy		33135		35237	76.9	32469	77.6	44742	77.3	44603	77.6
Death		2227	5.2	2550	5.6	2590	6.2	3479	6.0	3190	5.6
Illiness		3764 0	8.8	2938	6.4	3078	7.4	3268	5.6	2705	4.7
Parent/Guardia	n Illinoco	0	0.0	0	0.0	0	0.0	1284	2.2	1425	2.5
Lack of School		0	0.0	0	0.0	0	0.0	725	1.3	536	0.9
Others*	11CCUS	3428	0.0 8.1	0	0.0	0	0.0	4389	7.6	4986	8.7
		5720	0.1	5086	11.1	3702	8.8	0	0.0	0	0.0

Figure 9: Dropout by Reason in Primary Schools, 2003 - 2007

Figure 9 shows that the main cause for dropout in primary schools is truancy, (76%) followed by lack of needs (8.7%) and then pregnancy (5.6%) and death (4.7%) for 2007 alone.

The national completion rate has been in the decline since the introduction of UPE for both girls and boys. The persistent drop-out rates create excess capacity in the system in terms of teachers. If the situation is not checked immediately, the drop-out rate is expected to increase to 65% by 2010. This means that in three year's time, only about 35% of pupils who start primary schooling will be completing the primary education cycle.

Table 7The transition rate is almost uniform in all grades as the percentagerange between 88.4 to 92.9. Repetition rate is high for STD1-11 and 1V-V, whiledropout rate is also high for STD1V-V

Transition	2001/2002	2002/2003	2003/2004	2004/2005	2005/2006
Rates					
STD. 1-11					
PRRRDR	92.9	87.3	89.4	88.5	88.3
	3.2	7.2	9.6	9.1	10.6
	3.9	5.5	2.0	2.4	1.1
STD. 11-111					
	95.3	89.0	91.1	90.8	92.2
	2.3	5.8	5.0	6.2	6.2
	2.4	5.3	3.9	3,0	1.7
STD. 111-1V					
	94.8	89.3	93.6	92.6	92.0
	2.3	5.9	4.8	5.0	5.1
	2.9	4.8	2.6	2.4	3.0
STD.1V-V					
	84.5	76.7	83.7	78.7	81.7
	9.6	12.3	11.3	14.7	10.9
	5.9	3.0	5.0	6.6	7.4
STD.V-V1					
	96.4	95.8	95.3	96.4	97.8
	0.2	0.9	0.7	0.3	0.2
	3.4	3.3	4.1	3.3	2.0
STD.V1-V11					
	93.5	92.1	94.5	97.1	95.0
	0.2	1.5	0.7	0.1	0.0
	6.3	6.4	4.8	2.8	4.9
Average					
	92.9	88.4	91.2	90.7	91.2
	3.0	5.6	5.3	5.9	5.5
	4.1	4.7	3.8	3.4	3.4

The data shows that many children, who enter the school system at the primary level, do not complete the cycle. Pupils drop out at various stages of the education system, especially in Standards 4, 6 and 7. The situation is grave and worsening, a trend which contradicts the national goal of promoting literacy and fighting against ignorance. In this section, therefore, we highlight some of the major factors which are behind the low completion rates at primary school level.

The factors are divided into three categories: education policies and institutional processes; school-based factors; and household and community based factors.

The three categories of factors have caused inefficiency in primary education, though their impact varies from region to region. The inefficiency caused by low completion rates is a serious waste which must be arrested immediately. The government and its partners in education must come up with viable policy initiatives, including affirmative action in an endeavor to save the education system from inefficiency.

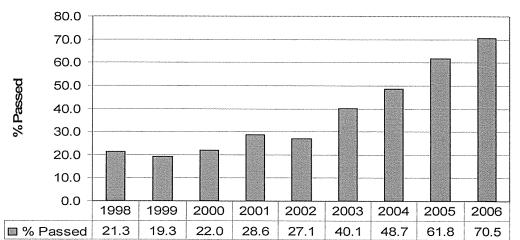


Figure 10: Primary School Leaving Examination (PSLE), Results 1998 - 2006

The data shown from the figure 10 below shows that, the percentage of pupils passing the examination in Primary education has been increasing from 19.3% in 1999 to 70.5% in 2006. This shows that the implementation of UPE policy in 2002 has an impact on primary education in improving performance in primary schools. Those will help to increase internal efficiency of this policy.

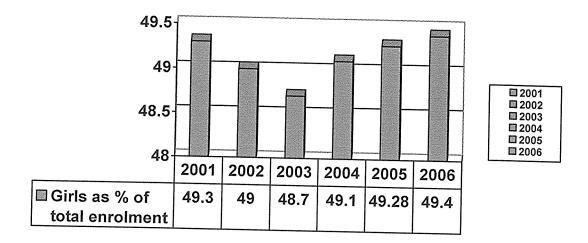
4.3 Research Question 3: what has been the efficiency and effectiveness of the UPE policy in Tanzania in terms of marginalized groups such as female and disadvantaged children in gross enrollment ratio to primary education?

	NER									
Year	Male	Female	Total	GPI						
2001	65.8	65.2	65.5	0.99						
2002	82.1	79.3	80.7	0.97						
2003	90.4	86.7	88.5	0.96						
2004	91.4	89.7	90.5	0.98						
2005	95.6	93.9	94.8	0.98						
2006	96.8	95.4	96.1	0.99						

Figure 9: Net enrolment ratio for girls in primary school

Data shows that the implementation of the UPE policy has a positive impact on girls' enrolment in standard one. Nationally, proportion of girls enrolling in standard one rose from 48.1% in 2001 to 48.5% in 2003. District level data shows even more dramatic increases in girls' enrolment. In Lindi Rural district, the proportion of girls enrolling in standard one rose from 34.6% in 2001 to 47.5% in 2002 and to 50.8% in 2003. In Arusha Municipality the proportion of girls enrolling in standard one rose from 44.6% in 2001 to 49.5% in 2002 and to 50.4%. In some districts the increase in girls' enrolment is not being sustained. In Monduli the proportion of girls enrolling rose from 44.9% in 2001 to 47.3% in 2002 but fell to 43.8% in 2003.

## Figure 11:Girls as % of total enrolment



Data shows that the implementation of the UPE policy has a positive impact on girls' enrolment in standard one. Nationally, proportion of girls enrolling in standard one rose from 48.1% in 2001 to 48.5% in 2003. District level data shows even more dramatic increases in girls' enrolment. In Lindi Rural district, the proportion of girls enrolling in standard one rose from 34.6% in 2001 to 47.5% in 2002 and to 50.8% in 2003. In Arusha Municipality the proportion of girls enrolling in standard one rose from 44.6% in 2001 to 49.5% in 2002 and to 50.4%. In some districts the increase in girls' enrolment is not being sustained. In Monduli the proportion of girls enrolling rose from 44.9% in 2001 to 47.3% in 2002 but fell to 43.8% in 2003.

 Table 10: Number of Orphans in primary schools by type of Orphanage, Grade and Sex, 2006.

One Parent			Τı	vo Parent		Total Orphans		
	Female	Total	Male	Female	Total		1	Total
	24435	52982	12839	11806	24645			77627
	27339	59133	13121	11401				83655
	32943	68650	14840	14109				97599
	40057	84620	16576	14819				116015
	41339	86479	16782	15945				119206
36583	33407	69990	14275	13505				97770
35135	31713	66848	14337	13181				94366
257469	231233	488702	102770	94766	197536	360239		686238
	Male 28547 31794 35707 44563 45140 36583 35135	MaleFemale2854724435317942733935707329434456340057451404133936583334073513531713	MaleFemaleTotal285472443552982317942733959133357073294368650445634005784620451404133986479365833340769990351353171366848	MaleFemaleTotalMale28547244355298212839317942733959133131213570732943686501484044563400578462016576451404133986479167823658333407699901427535135317136684814337	MaleFemaleTotalMaleFemale2854724435529821283911806317942733959133131211140135707329436865014840141094456340057846201657614819451404133986479167821594536583334076999014275135053513531713668481433713181	MaleFemaleTotalMaleFemaleTotal285472443552982128391180624645317942733959133131211140124522357073294368650148401410928949445634005784620165761481931395451404133986479167821594532727365833340769990142751350527780351353171366848143371318127518	Male         Female         Total         Male         Female         Total         Male           28547         24435         52982         12839         11806         24645         41386           31794         27339         59133         13121         11401         24522         44915           35707         32943         68650         14840         14109         28949         50547           44563         40057         84620         16576         14819         31395         61139           45140         41339         86479         16782         15945         32727         61922           36583         33407         69990         14275         13505         27780         50858           35135         31713         66848         14337         13181         27518         49472	MaleFemaleTotalMaleFemaleTotalMaleFemale2854724435529821283911806246454138636241317942733959133131211140124522449153874035707329436865014840141092894950547470524456340057846201657614819313956113954876451404133986479167821594532727619225728436583334076999014275135052778050858469123513531713668481433713181275184947244894

Data shows that the implementation UPE policy has also a positive impact on orphans and children with disabilities enrolment in primary schools. In almost all the districts, orphans and children with disabilities were enrolled in primary schools. In Nachingwea 531 orphans were enrolled. In Lindi region most orphan children are being supported by CARITAS through the provisions of school uniforms, shoes, compass boxes, pens, pencils and exercise books.

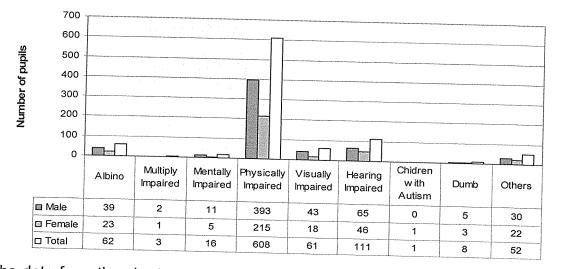


Figure 11: Number of pupils with Disabilities Primary Schools, 2007

The data from the chart reveals that the total number of children with disabilities Albino form 9.1%, multi impaired 7.8%, mentally impaired 32.7%, physical impaired 11.2%, visually impaired 8.2%, hearing impaired 2.0% and Others 29.1%. Most of the children who were enrolled in primary schools are children with physical disabilities. Children with sight, speech and hearing impairment were not enrolled as teachers said they did not have the skills and knowledge to teach these children. In Arusha 114 children with disabilities were enrolled in primary school, of whom, 51 had hearing impairment, 56 had learning difficulties and 7 had physical disabilities. In Karatu, of the 108 children with disabilities enrolled, 7 had vision impairment, 8 had hearing impairment, 3 were albino children, 27 had learning difficulties, 57 had physical disability, and 5 had speech impairment.

#### 4.4 Summary of Results/Findings

The findings show that, since the introduction of the UPE policy there has been an increase of enrollment in primary education with the deterioration of the quality of primary education due to few facilities to accommodate this big number of pupils.

The findings show that, the introduction of the UPE policy also has effect to the internal efficiency of primary education. This is because of high dropout rate, increase of repetition rate and reduction of survivals in primary education.

The findings show that, the introduction of the UPE policy has effect on the gross enrollment ratio to the marginalized groups such as female and disadvantaged children in primary education by increasing their gross enrollment.

#### **CHAPTER FIVE**

#### DISCUSSION, CONCLUSION AND RECOMMENDATIONS

#### 5.0 Discussion of Results

## 5.1 Determination of the efficiency and effect of UPE policy in Tanzania on the enrollment in primary education.

The first objective or question to be investigated is the effect of UPE policy on the enrollment in terms of primary education in Tanzania. Access and enrollment are given highest priority in the UPE policy. The aim is to increase overall gross and net enrollment of girls and boys. Indicators used include the construction of classrooms, teacher houses, desks, water tanks and pit latrines.

The findings suggest that, there are different factors affecting the school enrolment of boys and girls aged 7 to 13. Among girls, we find that the age of the child and the mother's education are the only factors that have significant impacts on enrolment. Younger girls tend to be out of school, which will result in delayed enrolments, while the mother's education has a positive impact on enrolment. For boys aged 7 to 13, younger boys also tend to be out of school but the education levels of both father and mother do not have impacts on enrolment. Although we find that the household expenditure increases boys' enrolment, but not girls' enrolment, in this age group, we obtain the opposite results in the older age group. Thus, it is not clear if there is a gender preference for boys over girls, or vice versa.

In the research, we have asked the reasons for the non-enrolment. The most frequently cited reason for dropouts or non-enrolment by parents or guardians of children aged 7 to 13 is 'not yet schooling age' for both boys and girls, which accounts for 69.7 percent for boys and 78 percent for girls. "Can't pay school fee" was the second most frequently cited reason for both boys (8.2 percent) and girls (10.1 percent). These results are different from the previous national household surveys that indicated school fees as the most important reason for non-

enrolment. Regarding the starting age, as many as 112 parents or guardians of children aged 7 claimed that it is too early to send their children to school. In addition, more than 10 parents or guardians of children over age 10 also responded that their child is not yet school going age. The distance to school in part may explain why younger children of school age do not still attend school due to security and physical reasons. However, the fact that some parents consider it too early to send their children aged over 10 raises some questions on parental awareness on schooling.

## 5.2 The efficiency and effect of UPE policy in Tanzania on internal efficiency

The second objective or question to be investigated was the effect of UPE policy on the internal efficiency in terms of primary education in Tanzania. Internal efficiency of an education system is revealed by the promotion, repetition and drop-out rates. The 2006 data indicate that national gross enrolment in primary education has gone up to 112% from 90.8% in 2002. This shows that within these 4 years the gross enrollment ratio has grown up tremendously by 21.9%. Regional disparities are glaring. Primary school participation rates are very low in the arid and semi-arid regions.

Despite the success of UPE, findings raise serious concern about the implementation of the policy in Tanzania. Although it is a key policy priority objective to improve considerably the quality of primary education, deterioration in quality of primary education was cited in the majority of sites across all Tanzania as the major negative effect of UPE. Deteriorating UPE quality was most frequently related to the following five negative effects of UPE: overcrowding due to extra-large classes; inadequate training, motivation, commitment and monitoring of teachers; less active and voluntary contribution by parents to primary education; less disciplinary controls and regulation; and lack of housing for teachers especially in rural areas. As one local leader explained:

"How can a P7 graduate teach P7 pupils and they pass? We cannot have first grades in our schools...."

But a close analysis of the data reveals that primary education has had internal efficiency problems, such as the high wastage because of low completion and high repetition rates. In this connection, drop-out and repetition rates are higher in upper classes, Standards 4 to 7. Every year, about 10% of pupils from each class fail to move on to the next, resulting in the high cumulative loss experienced by Standard 7. In 2004, for example, the boys and girls enrolled in Standard 1 were 279891 and 274944 respectively. However, four years later, only 269887 and 263832 boys and girls were enrolled in Standard 4, which is a dropout rate of about 21% and 5% for boys and girls, respectively.

The findings so far has been about numbers, of who gets into school and who doesn't. Perhaps an even more critical issue is the quality of education. The recently published Poverty and Human Development Report (2003) puts it well:

"... Substantial increases in enrolment ratios can be seen over the past few years. But enrollment levels are not an aim in themselves. We expect children, once they are enrolled, to stay in school, study in a positive learning environment, do well at examinations and have an opportunity to continue into secondary education... Unless sufficient investment is made to ensure the quality of primary education is maintained and enhanced, pupils and parents might be disappointed with the education process, resulting in the loss of the gains made so far" (p.23-24).

Media reports commonly cite overcrowding and the lack of teachers in many schools today. A few years back we read about the school where pupils go on leave when its only teacher falls sick. In the 13<sup>th</sup> July 2003 edition of *Nipashe* newspaper it was reported that one teacher teaches Standard One to Standard Five in a school in Arusha. Photographs of 100 or 200 children taught by one teacher are not rare. In these circumstances teaching becomes more a practice of riot control, with sticks flailing regularly, rather than a process of interaction and learning. Organizations such as Kuleana and UNICEF have alerted about

the widespread and largely illegal practice of corporal punishment in our schools, but there is no evidence that it is abating. Overcrowding may in fact have increased the incidence of corporal punishment.

# 5.3 The efficiency and effect of UPE policy in marginalized groups such as female and disadvantaged children

The third objective or question to be investigated was the effect of UPE policy on the marginalized groups such as female and disadvantaged children in gross enrollment ratio in primary education. The UPE policy aims at expanding access, enhancing equity, and increasing efficiency in education systems. The government faces a particular challenge in providing quality basic education to marginalized populations such as the poor, ethnic minorities, orphans and sometimes girls.

The findings do not concur with the literature from the researcher. In finding out the grade-specific enrolment at primary education by gender indicates that the average transition loss for girls is lower than that for boys. The association between wastage and age is more pronounced among boys than among girls at primary level.

The advent of UPE policy has enabled many more children to exercise their right to free primary education than before. However, this increase has not been entirely girl-friendly. The percentage of female pupils continued to decline from 48.7% in 2002 to 48.5% in 2003 however the data also show that starting 2004 the number of girls who are enrolled has been increased. This shows that represents 145,000 girls who are not accessing primary education. We expect by 2015 the total number of girls enrolled in the UPE program will shoot drastically and this is the period which we can comfortable say the UPE policy has been fully achieved nonetheless the road towards that achievement is a smooth one regardless of the minor setbacks.

#### **5.4 Policy Implications and Conclusion**

The researcher articulates some of the critical challenges in primary education today that UPE policy will need to overcome. Change takes time. The magnitude of the problem is such that one cannot expect everything to improve overnight. But the key question is this: are we heading in the right direction? There are other basic questions. What are the purposes of education? What is the meaning of an educated child? What do we want the experience of seven years of school to be like? What is our vision of the role of education and educated citizens in society?

Analysis of the UPE policy in Tanzania reveals there is welcome evidence of some success in achieving a key policy priority objective and strategy of improving access, equity and physical facilities expansion at the primary level. The policy implementation during 2002, as earlier stipulated when the UPE policy was first launched, to all children with the age of going to school has made a significant contribution, and partly this strategy may in the long run turn out to be critical to sustaining progress towards and to achieving the UPE goal by 2015. However, the major challenge facing UPE in Tanzania is the deteriorating quality mainly due to poor or low inputs especially teachers and teaching materials including textbooks, overcrowding due to extra-large classes and lack of inspection or monitoring of teachers, and due to low system efficiency especially the high rate of absenteeism or dropping out and the widespread practice of 'automatic promotion'.

Second, although this study does not investigate the quality of education in detail, quality improvements would be essential for retaining pupils at upper grades. A government report indicates that numbers of teachers and schools increased by 41 percent while the enrollment increased by 171 percent between 2002 and 2006 (MOES, 2007). This raises concerns of deterioration in the quality of public primary schools.

As shown in the previous section, the UPE policy seems to have decreased delayed enrollment in primary school and achieved higher educational attainment at least up to grade 4 for boys and grade 5 for girls in primary education. The UPE policy has also achieved a low economic burden of education at the primary level for all households, regardless of their household expenditure level. As a result, the UPE policy has positive impacts on the poor, especially girls, in improving their access to school. In this respect, the UPE policy has contributed to the access and equity of education as a pro-poor policy.

However, the study also reveals that there should be more than just the one demand-side policy intervention of reducing the school tuition in public primary education to achieve universal primary education. First, internal inefficiency, such as delayed enrollment and repetition, remains a major problem in primary education in Tanzania. Thus, further policy interventions would be necessary to respond to the reasons for internal inefficiency.

From the supply side perspective, the funding scheme for primary schools could provide better incentives for them to reduce internal inefficiency. For instance, the Government of Tanzania provides each public primary school the capitation grant based on the number of pupils in the school. Under this financing scheme, schools have incentives to keep as many pupils as possible. This could also provide an incentive for schools to encourage pupils to repeat grades. The question remains as to whether this potential incentive is strong enough for schools to worsen internal inefficiency. Although we do not have empirical evidence to either support or dismiss this incentive, the funding scheme should be modified to avoid such a possibility. For instance, some sort of reward schemes for schools that achieve high internal efficiency could be useful as an alternative funding scheme.

The proper supply-side-policy interventions, such as providing enough school facilities in the nearby neighborhood, or the demand-side-policy interventions,

such as improving parental awareness, should follow the abolition of school tuition. In response to these challenges, the Ministry of Education and Culture is currently making efforts to pay special attention to schools in the "hard-to-reach" areas. Special policy intervention in these areas has recently been accepted in the form of top-up salary and provision of housing for teachers. Also, school construction in the remote areas is to be facilitated using school mapping based on the recent Geographic Information Survey (GIS) results. Such targeting strategies are believed to further the benefits of UPE to marginalized children (Malinga, 2005).

Public resource allocation is a difficult endeavor in countries like Tanzania where resources are extremely limited. Tanzania's UPE has been successful in expanding educational opportunities to children in poor households. The next step should target marginalized children who have not received benefits from the current UPE. For the supply-side policy intervention, improvements in the quality and internal efficiency of public primary education should be enhanced, coupled with more comprehensive national development strategies.

Finally, low completion rates in upper grades suggest high indirect costs for older children. While the UPE policy reduces the costs of primary education, more comprehensive rural development strategies should increase the benefits from primary education so that the expected benefits exceed the total costs of the direct and indirect costs of education.

#### 5. 5 Policy Recommendations.

Based on the findings, this section presents the recommendations deemed necessary to help the effectiveness and efficient implementation of UPE policy in Tanzania in order to avoid the common problems facing countries which have also introduced the UPE policy.

Innovative solutions are needed to ensure quality and access. The supply of infrastructure, textbooks, materials, and teachers needs to be increased rapidly

to accommodate the huge increase in enrollment. Innovative and interim approaches that ensure good learning are needed in all three areas.

A variety of complementary educational opportunities are needed to reach underprivileged people, marginalized groups, and dropouts. Without such measures, a new generation of dropouts will perpetuate the vicious cycle of illiteracy.

Reaching universal primary education is not enough to break the cycle of poverty. Removing the burden of paying for education increases the number of poor children who attend school, helping to break the poverty cycle. Free primary education must therefore be supported nationally and internationally until the returns to households and the national economy are large enough so that international support is no longer needed.

High financial costs were the most frequently cited reason for absenteeism and dropping out. UPE regulations in Tanzania prohibit turning away from school children that default on the UPE-related charges and especially uniforms, scholastic materials and lunch at school fees. The Ministry of Education and Culture needs to devise a feasible mechanism for enforcing this regulation because the researcher found that children without scholastic materials and uniform were turned way from school in very many cases.

The concept of quality is perceived in different ways and this can affect the selection of strategy for effectiveness and efficiency of UPE policy. While there are many options for improving quality, responsibility for assessing the feasibility and actual decision on the choice of options should realistically be at school and classroom level, where the practicality and feasibility are better understood, and where a variety of local actors could play a more pivotal role. In many instances, decisions made at national levels also do not take into account the varying

contextual factors at sub-national and school levels. Such policy choices are also bound to be ineffective.

One part of the solution to institutional problems is parental and community involvement in education, which anchors education in the social fabric of the community, fosters demand, and ensures that schooling provides social benefits and economic returns that reflect local priorities and values. Whether parents and communities provide financial support, administrative support, or simply play an oversight role, local engagement, commitment, and support remain vital to ensuring that schooling is a priority for the community. Because the direct and opportunity costs of schooling and the real or perceived lack of economic returns dampen demand for education, such support cannot be taken for granted.

Phasing in free primary education grade by grade is easier than introducing it throughout the system simultaneously. But it still creates problems. Policymakers need to be aware of the tradeoffs between introducing free primary education one grade at a time (stepped implementation) and adopting a .big bang approach. Stepped implementation is slower than the simultaneous approach, but it gives policymakers time to plan, budget, build schools, obtain materials, and hire teachers. To take advantage of free education, some parents enrolled children in primary school early (since preschool is not free). Others held children back to avoid paying fees in the next grade. In addition, dropouts returned to school and adults enrolled in large numbers. These inflated enrollments caused bulges in the system in the fee free grades. The big bang approach is harder to manage than the stepped approach, but it provides quick results and does not create such a big bulge moving through the system.

The researcher found out that inadequate training, motivation, commitment and monitoring of teachers, lack of housing for teachers especially in rural areas, extra-large classes due to few teachers and the negative influence of private schools, among others, were most frequently related to the deteriorating quality

of UPE in Tanzania. Therefore, motivating teachers to work in public schools, especially in rural and difficult-to-live-in areas, and improving supervision and monitoring by district school inspectors are among the strategies that may prove vital to sustaining progress towards and to achieving the effectiveness of the implementation of UPE policy and quality EFA goal by 2015. This is the most frequently mentioned community recommendation to improve UPE quality in Tanzania.

The efficiency perspective, leading to a view common in most the researchers is the curriculum being irrelevant, causing children to leave school, combined with the growing problem of educated unemployment that emerged in the 1990's, focused attention on the development of more relevant curricula. The introduction of practical skills and the teaching of a realized curriculum were proposed but were not acceptable as most parents and pupils desired an academic curriculum leading to wage employment. Curriculum development centers were established to develop local and contextually relevant curricula that would make education more meaningful. The production of improved textbooks, teaching materials and in teaching quality is part of that endeavor to increase the holding power of schools. In the main, the international literature suggests that improving the quality of education will reduce student dropout and improve retention, although the research evidence is not conclusive.

It is noteworthy that internal efficiency can be symbolically improved by automatic promotion, but a real improvement in quality of learning requires attention to the causes of low learning in school. Remedial work designed to help failing pupils to succeed can be carried out by teachers, or by pupil peers. But remediation requires an adequate understanding of the failing students' learning problems. Therefore, unless a specific policy framework and strategy for implementing automatic promotion is designed and effected, the widespread haphazard practice of automatic promotion in Tanzania threatens to undermine the progress made so far or likely to be made in the future towards achieving the quality education goal by 2015. Education for all requires a new paradigm of education. If free primary education is to mean education for all and not just attendance at school, the change in the educational paradigm has to be taken seriously from the start. Education for all means that teaching, materials, and assessment have to meet the learning needs of a wide range of mixed-ability, inclusive classes. At the outset and throughout the process, issues of quality need more emphasis, and they take more time to solve than simply relieving parents of the burden of school fees. Universal completion with acceptable levels of learning achievement rather than universal access should be the goal.

Intersectoral strategies are needed to reach universal primary education. HIV/AIDS, which is reducing the supply of teachers and administrators and cutting household income, represents the greatest threat to reaching universal primary education. In the short- to medium-term, educational systems will need innovative approaches to human resource development to compensate for the impact of HIV/AIDS on the teaching profession. Containment of the HIV/AIDS pandemic alone will not solve the problem of reaching universal primary education, however. Rising birth rates will continue to increase the demand for schooling, putting pressure on already overstretched resources. Making primary education free is only part of the solution to reaching universal primary education. A combination of intersectoral strategies that deal with food security, health care, and care of orphans is needed.

The implementation and sustainability of UPE is to a large extent affected by the quality of inputs (i.e. teachers, textbooks, teaching materials, basic infrastructure, and leadership). However, these inputs can be effective in strengthened institutional arrangements that promote decentralisation, pluralism, democratic provision, transparency, effective resource flow and accountability. The success of the Community Education Fund (CEF) and School Mapping initiatives at district level suggests that there is a significant relationship between village level

social capital of which trust is a major determinant, parental participation in school related activities and school outcome improvement. This calls for a strict demarcation between the sphere of the "Education Officials" and that of the "funding availability through a variety of stakeholders". That is officials must establish a distance between themselves and interest groups seeking to extract concessions as questions of patronage and corruption will deter UPE productivity and sustainability.

The uneven allocation of teachers continues to be a problem with consequent implications for the quality of education in primary schools. In 2002 there was some reallocation of teachers towards and within rural areas but this process did not go very far. Some remote Districts received only 50% of the new teachers allocated to them. There seems to be no easy solution to this problem which relates partly to the lack of adequate facilities, notably teachers houses, especially in remote and inaccessible areas, partly to the provision of suitable incentives, and partly to the fact that 46% of teachers are female. Most women teachers are married and can not be located far from their husbands and families. Many of these are located in urban areas and if they were required to move elsewhere they would give up teaching. There seems to be a need to improve and clarify the criteria and mechanisms relating to the allocation of teachers between and across different Regions and the provision of incentives.

In implementing the UPE policy the government should start acting introspectively putting in mind the children after completion of primary seven. This can be done laying strategies and programmes. For example, after completion of primary seven these children should be enrolled in Vocational or Technical training such as carpentry, electrical engineering, plumbing and others for a period of 4 to 6 years, by then this would have developed their skills in various areas of study. This will then help them in getting employed or start their own business.

#### 5.6 Summary of recommendations

Free education is not enough to increase enrollment of children but Innovative solutions are needed to ensure quality and access. The supply of infrastructure, textbooks, materials, and teachers needs to be increased rapidly to accommodate the huge increase in enrollment.

A variety of complementary educational opportunities are needed to reach underprivileged people, marginalized groups, and dropouts. Without such measures, a new generation of dropouts will perpetuate the vicious cycle of illiteracy.

UPE regulations in Tanzania prohibit turning away from school children that default on the UPE-related charges and especially uniforms, scholastic materials and lunch at school fees. To take advantage of free education, some parents enrolled children in primary school early (since preschool is not free). Education for all requires a new paradigm of education.

From the supply side perspective, the funding scheme for primary schools could provide better incentives for them to reduce internal inefficiency. For instance, the Government of Tanzania provides each public primary school the capitation grant based on the number of pupils in the school. Another illustration, some sort of reward schemes for schools that achieve high internal efficiency could be useful as an alternative funding scheme.

The proper supply-side-policy interventions, such as providing enough school facilities in the nearby neighborhood, or the demand-side-policy interventions, such as improving parental awareness, should follow the abolition of school tuition.

The proper supply-side-policy interventions, such as providing enough school facilities in the neighborhood, or the demand-side-policy interventions, such as improving parental awareness, should follow the abolition of school tuition.

#### 5.7 Recommended topics for future researchers in Tanzania

The application of UPE policy in dealing with early pregnancies and the girl child.

Impact of HIV/AIDS on the implementation of UPE policy and the government efforts to overcome the problem.

Considerations on the Culture and Traditions of various communities in light of UPE policy and its effectiveness.

UPE policy and its effectiveness in eradicating child labour

#### REFERENCES

- Alonso-Ilterme, R.( 2002). *The Elimination of User Fees for Primary Education in Tanzania*. World Bank Institute
- Burns, B. and Mingat, A. & Rakotomalala, R. (2003). *Achieving Universal Primary Education by 2015. A Chance for Every Child.* World Bank
- DANIDA. (2001). *Review of the PRS Processes in Tanzania*. A Contribution to the International Review of the PRSP Process
- Evans, A. and Erasto, N. (2003). *Tanzania Development Policy Review* 21(2):271- 287
- Galabawa, J.C.J. (1999). *Basic Education Renewal Research for Poverty Alleviation*. Faculty of Education: University of Dar es Salaam
- Galabawa, J.C.J. (1997). Issues and strategies for primary and secondary education decentralization in Tanzania. Papers in Education and Development, No. 18, pp. 66-83
- Galabawa, J.C.J. (2001). Developments and Issues Regarding Universal Primary Education (UPE) in Tanzania in ADEA Biennial Meeting 2001<u>.</u> Arusha, Tanzania: ADEA
- Galabawa, J.C.J. (2003). Complementary Basic Education in Tanzania (COBET): Some revelations from a strategy for access and quality improvement at primary school level. Paper presented at UNICEF workshop 20 June 2003. Dar es Salaam
- Government of the United Republic of Tanzania. (2002-2006) *Education Sector Development Programme,* Primary Education Development Plan

- Hakielimu (2003). What the papers are saying about Primary Education Development Plan (PEDP) Finances, News clippings, September 2002 – January 2003
- Holtom, Robert D. (2003). *Coercion and Consent. The World Bank in Tanzania* 1970-2001. Ph.D. dissertation submitted to the University of Wales, Swansea.
- Ishengoma, Johnson M. & Deborah J. Youngman (1999).: The Imperiled Promise of Reform. *Journal of Education* 181(1), pp. 59- *Educational Equity in Tanzania* 73
- Kalugula, C. & D.W. Pambe (2002). The policy reform initiatives development of the education sector in Tanzania, paper presented at a Policy Information Sharing Workshop, Dar es Salaam, 6-7
- Ministry of Education and Culture Kiwia, S.F.N. 1994. (2002). The operational efficiency of the administrative organization of Tanzania education system, UTAFITI (New Series), Vol 1 No 2, pp. 71-87
- Klees, Steven J. (2002). World Bank Education Policy: New Rhetoric, Old Ideology. International Journal of Educational Development, 22(5), pp. 451-474
- Kuleana. (1999). *The state of education in Tanzania. Crisis and opportunity.* Dar es Salaam
- Kalugula, C. and D.W. Pambe (2002). *The policy reform initiatives development* of the education sector in Tanzania, paper presented at a Policy Information Sharing Workshop, Dar es Salaam, 6-7

- Lauglo, J. (1996). Banking on education and the uses of research a critique of: World Bank priorities and strategies for education. International Journal for Educational Development, Vol 16, No 3, pp. 221-233
- Maarifa Ni Ufunguo. (2001). Cost Sharing: A Case Study of Education in Kilimanjaro. Arusha
- Maarifa Ni Ufunguo. (2003). *Financing Education in Kilimanjaro.* The Story Continues. Arusha
- Malekela, G.A. and A.S. Ndeki (2001). *Access and equity in basic education in Tanzania*, Papers in Education and Development, No. 21, pp. 124-137
- Mbelle, A. and J. Katabaro (2003). *School enrolment, performance and access to education in Tanzania*. Research Report No. 03.1, REPOA, Dar es Salaa
- Mpango P.I.N. and D.P. Mushi (1998). *Financing primary education in Tanzania: impact and prospects of the matching grant and targeted subsidy mode of cost sharing*. Papers in Education and Development, Volume 19, pp. 1-16, University of Dar es Salaam
- Martin, A. (2005), social sciences research conceptual methodology and analysis, Makerere University Printery.
- Naschold, F. and Adrian, F. (2002). *How, When and Why does Poverty get Budget Priority? Poverty Reduction Strategy and Public Expenditure in Tanzania.* Overseas Development Institute (ODI)
- Omari, I. M. & Mtatifikolo, F. (2001). *Determinants of Local Capacity to deliver Quality Social Services: The case of education in decentralized governance.* University of Dar es Salaam

Omari, I.M. (1999). The relationship between education and income in poverty alleviation strategies, in Galabawa 1999 (ed.), pp.66-102

- PADECO Co. Ltd. (2002). The Study on School Mapping and Micro Planning in Education in the United Republic of Tanzania. Final Report: Summary, Volume I and Volume II.
- Penrose, P. (1998). Cost Sharing in Education Public Finance, School and Household Perspectives. Department for International Development (DfID), UK
- Rajani, R. (2003). *The education pipeline in East Africa.* Dar es Salaam *Ford* Foundation,
- Rajani, R. and Suleman S. (2003). Is extra funding for primary education making a difference?
- Reilly, B. and Samer Al-Samarrai (2000). Urban and Rural Differences in Primary School
- Roger Avenstrup, Xiaoyan Liang & Søren Nellemann, Universal Primary education and Poverty Reduction, Kenya, Lesotho, Malawi and Uganda.
- Samoff, J. (1999). Education sector analysis in Africa: limited national control and even less national ownership.\_International Journal of Educational Development, Vol 19, pp. 249-272
- Samoff, J. (1999). When Research Becomes Consulting. Paper presented at the Annual Meeting of the Comparative and International Education Society (Toronto, Ontario, Canada, April 14-18, 1999)
- TADREG. (1993). *Parents' attitudes towards education in rural Tanzania*. Research Report no. 5, Dar es Salaam

- Therkildsen, Ole (2000). Contextual Issues in Decentralization of Primary Education in Tanzania. International Journal of Educational Development Vol 20 No 5, pp. 407-421
- The United Republic of Tanzania *Education sector development programme* 2006, Dar es Salaam, Aide-Memoire.
- The United Republic of Tanzania, *Joint review of the primary education development plan 2004*, Ministry of education and culture.
- TzPPA. (2003). *Education and vulnerability to poverty in Tanzania*. Policy Briefing Paper, Tanzania Participatory Poverty Assessment, Dar es Salaam
- United Republic of Tanzania (2002). *Poverty and Human Development Report.* Dar es Salaam Mkuki na Nyoti Publishers,
- United Republic of Tanzania (2003). *Financing education. What do we know about funds at school level.* President's Office Regional Administration and Local Government
- United Republic of Tanzania (2003). *Joint Review of the Primary Education Development Plan (PEDP)*. Ministry of Education and Culture. December
- Vavrus F. (2002). Making Distinctions: Privatisation and the (Un) Educated Girl on Mount Kilimanjaro, Tanzania. International Journal of Educational Development, Vol 22 No 5, pp. 527- 547

#### Websites.

www. unesco.org

www.globalurban.org

www. comminit.africa

http://www.adeanet.org/biennial/papers/en\_arusha\_galabawa.pdf. http://www.undp.org/mdg

# **APPENDIX A: Age and gender of respondents**

### Table 1: Age of respondents (Students)

Age group	Frequency	Percentage
20 - 30	30	15
30 - 40	58	29
40 and above	112	56
Total	200	100

Source: Primary data N = 200

# Table 2: Gender of Respondents (from different key stakeholders)

Gender	Frequency	Percentage
Male	120	60
Female	80	40
Total	200	100

Source: Primary Data

## APPENDEX B: Questionnaire to different stakeholders in Educational sector

#### QUESTIONNAIRE.

QUITIONAIRE REGARDING ON IMPLEMENTATION OF POLICY OF UNIVERSIAL PRIMARY EDUCATION AND IT'S EFFECTIVENESS IN TANZANIA

This questionnaire will be used strictly for the given research purpose, any information given will be treated with utmost confidentiality.

Name:
Organisation represented:
Position in the organisation:
Level of education:

#### PART ONE: PROFILE OF THE RESPONDENTS.

Age: .....

Gender: Male

Female

Experience: .....

#### PART TWO: THE KNOWLEDGE OF THE RESPONDENTS ON THE POLICY.

DIRECTION: Kindly indicate which best describe your response. Please be guided accordingly.

# PART THREE: THE EXTENT OF IMPLEMENTATION OF UPE POLICY. RATING GUIDE:

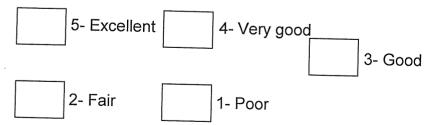
		2- Strongly disagree	
	Implement	ation of UPE policy was	s in time.
••••••	Evaluation	of its performance.	
••••••	Employing	of teachers is based or	n standard.
	Regular fee	dback on policy status.	
	UPE policy	budget is spent on or re	eflected

PART FOUR: FACTORS THAT INFLUENCE POLICY IMPLEMENTATION. DIRECTION: Rank the factors from the most influential to the lowest.

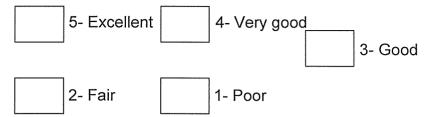
- 1. Political influence (influence of elected leaders such as members of parliament)
- 2. Economic influence (availability of resources to implement policy)
- 3. Cultural influence (interference of culture on the implementation of policy)
- 4. Administrative influence (poor supervision and knowledge of work performance)

# QUESTIONNAIRES

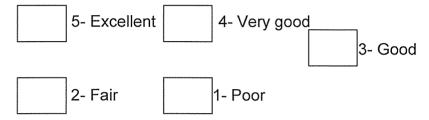
1. How have parents influenced changes in government policies related to improvement of UPE policy on enrollment, completion, quality and learning outcomes?



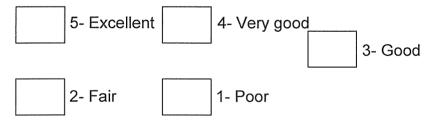
2. How do you rate enrollment, completion, and learning outcome of UPE policy been commensurate with the investments made?



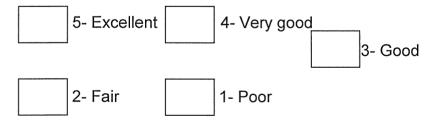
3. How do you rate the efforts made by the government in supporting UPE policy in increasing girl's participation in primary education?



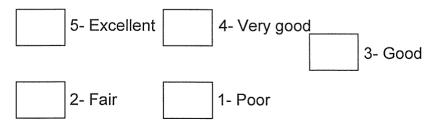
4. How do you rate UPE policy impact on female learning outcomes including completion rates and learning outcome?



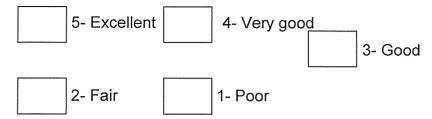
5. How would your rate monitoring and evaluation systems in implementation of UPE policy in getting effective and efficiency outcomes?



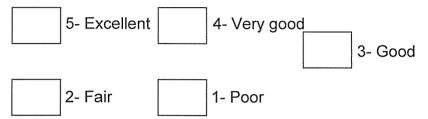
6. What is your opinion on the rules and regulations of UPE policy in helping in its effectiveness?



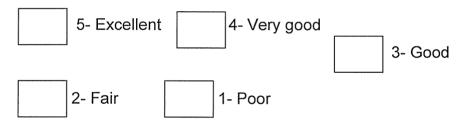
7. What is your opinion on the timing of implementation UPE policy?



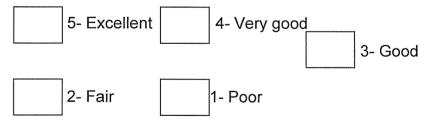
8. What is your opinion on the employment of teachers in primary schools that are covered by the policy?



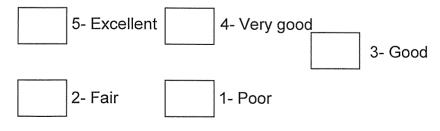
9. Do you think the budget allocated to UPE policy is sufficient to its effectiveness?



10. How do you rate the extent of implementing UPE policy as up to now?



11. Do you think the government assistance in UPE policy helps in increasing internal efficiency of primary education?



#### QUESTIONNAIRES

1. What explicit and implicit strategic objectives can be derived from UPE policy and strategy documents concerning universal primary education development against which the policy effectiveness can be evaluated?

2. How relevant has universal primary education development been in the various regions where it has been supported?

 	 ******************	

3. How effective has the government's assistance to universal primary education been in helping country improve school enrollments, completion rates, school quality and learning outcomes, especially for girls and for the poor?

 	 ******	

4. What components have been covered in the various UPE policy programs (e.g., physical facilities, curriculum, assessment reform, textbooks, other learning materials, data management, School mapping, Governance, decentralization, community participation, teacher training and incentives, management capacity, financing, budget development, efficiency) and how effective have they been?

5. What efforts have been made in supporting universal primary education policy to increase girl's participation and completion and which have been successful? ------..... ..... ..... ..... ..... 6. Is there any evidence of policy impact on female learning outcomes (completion rates and learning gains)? \_\_\_\_\_ ..... ..... ..... ..... ..... 7. To what extent has universal primary education policy in the portfolio targeted the poor? ..... \_\_\_\_\_ ..... \_\_\_\_\_ ..... 8. How have the poor benefited from the policy (in terms of increased participation and improved learning outcomes)? ..... ..... ..... 9. How has the effectiveness of government assistance to universal primary education been affected by the mix of instruments used, government effectiveness in supervising policy, country ownership of policy supported policy and the involvement of key stakeholders outside government, partnerships with other donors and civil society and constraints?

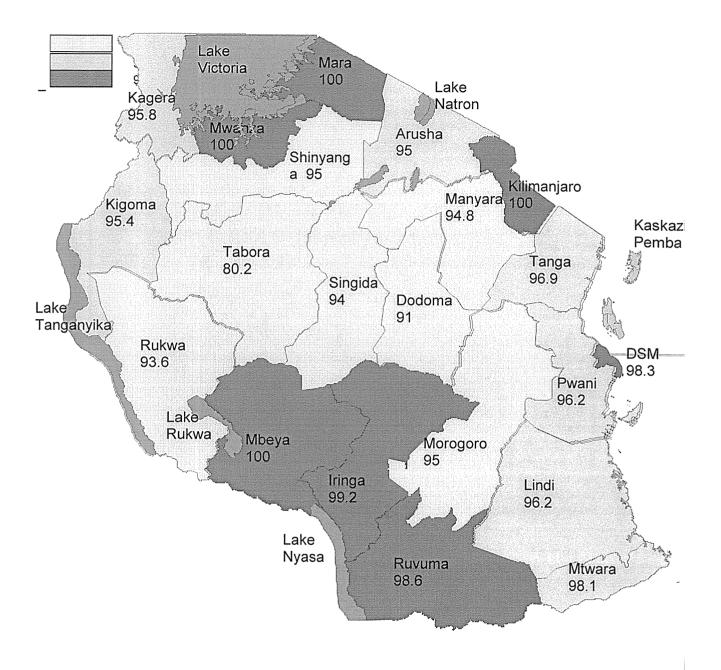
10.To what extent have good monitoring and evaluation systems (including student assessment systems) been institutionalized in schools receiving government support?

11. Are there any good examples of monitoring and evaluation data being used to improve decision making and implementation in UPE policy?

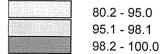
12.What can findings and lessons from past and current government programs of support for universal primary education teach us about the feasibility and likely effectiveness of new initiatives in support of increased basic knowledge and skills?

13.What can evaluation results at the country level teach us about effective ways of adjusting MDGs to national realities?





#### Key: NER



# **APPENDIX D: Quality control- Content Validity Index**

The calculation was done by Rev Dr. Chandy Ninan Maltaltical, based on the following formula

CIV = Number of items rated as relevant All items in the questionnaire

Likert: No of questions. 11. All relevant

 $CVI = \frac{11}{11} = 1$  that is 100%

Open-ended question  $\frac{8}{9}$  = 0.88 that is 88%

Therefore, an average. CVI = 0.94, hence the instrument is certified valid that is 94%

# **APPENDIX E: Quality control- Reliability Coefficient Index**

No of	Score odd	Score	X <sup>2</sup>	Y <sup>2</sup>	XY
paired	No X	even No Y			
observation					
1	18	16	324	256	288
2	16	18	256	324	288
3	12	10	144	100	120
4	8	9	64	81	72
5	7	5	49	25	35
Σ	61	58	837	786	803

$$\operatorname{rxy} \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{[n(\sum x^2) - (\sum x)^2] n(\sum y^2) - (\sum y)^2}}$$

Where n = Number of paired observations

 $\sum xy = Sum of cross products of x and y, that is multiply the corresponding values of x and y and sum these product$ 

 $\sum x$  and  $\sum y$  are sums of the x and y scores respectively

 $\sum x^2$  sum of all the squared values of the x scores

 $\sum y^2$  sum of all the squared values of the Y scores

 $(\sum x)^2$  sum of all x scores. Thus sum squared

 $(\sum y)^2$  sum of all y scores. This sum squared

$$rxy = \frac{s(803) - (61)(58)}{\sqrt{[5(837) - (3721)][5(786) - (3364)]}}$$
$$rxy = \frac{4015 - 3538}{\sqrt{(4185 - 3721)}(3930 - 3364)}$$
$$rxy = \frac{477}{(21.5)(23.8)}$$
$$rxy = \frac{477}{511.7}$$

Similarly the coefficient of reliability was also estimated using split half reliability coefficient, using spearman Brown prophecy formula

$$rxy = \frac{2r^{1}xy}{1+r^{1}xy}$$

Where rxy= coefficient reliability r<sup>1</sup>xy= correlation between the two split halves

 $rxy = \frac{2x0.932}{1+0.932}$  $rxy = \frac{1.864}{1.932}$ 

rxy= 0.96 Therefore, coefficient reliability = 0.96