Research on Poverty Alleviation, REPOA, is an independent, non-profit organisation concerned with poverty and related policy issues in Tanzania. REPOA undertakes and facilitates research, enables monitoring, and promotes capacity building, dialogue and knowledge sharing.

REPOA’s research agenda is concerned with poverty and its alleviation. Our objectives are to:
- develop the research capacity in Tanzania;
- enhance stakeholders’ knowledge of poverty issues and empower them to act;
- contribute to policy dialogue;
- support the monitoring of the implementation of poverty related policy;
- strengthen national and international poverty research networks, and
- forge linkages between research(ers) and users.

It is our conviction that research provides the means for the acquisition of knowledge necessary for improving the quality of welfare in Tanzanian society.

REPOA’s Research Reports contain the results of research financed by REPOA. Our Special Papers contain the findings of commissioned studies conducted under our programmes of research, training and capacity building. The authors of these research reports and special papers are entitled to use their material in other publications; with acknowledgement to REPOA.

REPOA has published the results from this research as part of our mandate to disseminate information. Any views expressed are those of the authors alone and should not be attributed to REPOA.

Research on Poverty Alleviation (REPOA)
P.O. Box 31223, Dar es Salaam, Tanzania
157 Mombani Street, Regent Estate
Tel: +255(0)(22) 270 00 63 / 277 2556
Fax: +255(0)(22) 277 57 38
Email: repoa@repoa.or.tz
Website: www.repoa.or.tz

The Impact of Reforms on the Quality of Primary Education in Tanzania

Amon V. Y. Mbelle
The Impact of Reforms on the Quality of Primary Education in Tanzania

Amon V.Y. Mbelle

Research Report 08.1
# Table of Contents

List of Tables v  
List of Figures v  
Abbreviations vi  
Abstract vii  

1 Introduction: Improving Quality of Human Resources for Growth and Poverty Reduction 1  
1.1 Investing in education for economic growth and social stability 1  
1.2 Balancing quantitative (access) and qualitative aspects 1  
1.3 Aiming beyond primary education provision 1  
1.4 Meeting the challenges of primary education delivery in Tanzania 2  
1.5 Research questions 3  
1.6 Objective of the study 3  
1.7 Significance of the study 3  
1.8 Limitations of the study 3  
1.9 Layout of the report 4  

2 Context: Primary Education Delivery in Tanzania: Programmes, Previous Evaluations and the Quest for Universal Secondary Education 5  
2.1 System, infrastructure and efficiency 5  
2.2 Measures to improve access 6  
2.3 Measures to improve quality (Literature survey) 8  
2.4 Assessment of quality improvement 9  
2.5 The case for Universal Secondary Education 12  

3 Financing Primary Education in Tanzania 14  
3.1 Resource framework 14  
3.2 Financing of primary education in the context of PEDP 16  
3.3 Targeting quality improvement in the use of PEDP funds 16  

4 Assessment of Quality Improvement Reforms: Empirical Evidence from the Dar es Salaam Region 17  
4.1 Sampling and sample size 17  
4.2 Sample characteristics 17  
4.3 Method of analysis 20  
4.4 Results - regression analysis and correlation analysis 20  
4.5 Teacher characteristics and quality 21  
4.6 Pupils’ perspectives 22  
4.7 Suggested interventions to improve delivery 22  
4.8 Comparison of performance between government and private schools 23
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Governance Issues in Primary Education Delivery in Tanzania</td>
<td>25</td>
</tr>
<tr>
<td>5.1</td>
<td>Good governance in the context of primary education delivery</td>
<td>25</td>
</tr>
<tr>
<td>5.2</td>
<td>Participation in decision making concerning delivery of primary education services</td>
<td>25</td>
</tr>
<tr>
<td>5.3</td>
<td>Issues of financial management</td>
<td>26</td>
</tr>
<tr>
<td>6</td>
<td>Concluding Remarks</td>
<td>28</td>
</tr>
<tr>
<td>6.1</td>
<td>Outstanding issues in primary education delivery</td>
<td>28</td>
</tr>
<tr>
<td>6.2</td>
<td>Equity-quality trade-off</td>
<td>28</td>
</tr>
<tr>
<td>6.3</td>
<td>Need to increase access to quality secondary education</td>
<td>29</td>
</tr>
</tbody>
</table>

Bibliography

- Annex I: NSGRP Education Targets
- Annex II: Secondary Education Development Plan Targets 2004/05 – 2008/09

Publications by REPOA
List of Tables

2.1 Enrolment in primary schools in Tanzania 2000-2005 7
2.2 Tanzania percentage of pupils who passed STD. VII examinations, 2002-2006 11
2.3 Performance in STD. VII exams by gender 2002-2005 11
2.4 Tanzania PSLE results: Best five regions, 2001-2005 12
3.1 Actual central government expenditure and education spending 2000/01-2004/05 14
3.2 Primary education funding in Tanzania: 2000/01-2006/07 15
4.1 Dar es Salaam: Selected characteristics of primary education delivery 2003 18
4.2 Analysis of quality factors 20 4.3 Regression results: performance in non-government schools 23

List of Figures

3.1 Structure of PEDP expenditure 15
3.2 Domestic and external financing of PEDP 16
## Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIDS</td>
<td>Acquired Immuno-deficiency Syndrome</td>
</tr>
<tr>
<td>BEMP</td>
<td>Basic Education Master Plan</td>
</tr>
<tr>
<td>CAG</td>
<td>Controller and Auditor General</td>
</tr>
<tr>
<td>CFS</td>
<td>Consolidated Fund Services</td>
</tr>
<tr>
<td>COBET</td>
<td>Complementary Basic Education and Training</td>
</tr>
<tr>
<td>EFA</td>
<td>Education For All</td>
</tr>
<tr>
<td>EMIS</td>
<td>Educational Management Information System</td>
</tr>
<tr>
<td>ESDP</td>
<td>Education Sector Development Programme</td>
</tr>
<tr>
<td>ESRF</td>
<td>Economic and Social Research Foundation</td>
</tr>
<tr>
<td>ETP</td>
<td>Education Training Policy</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GER</td>
<td>Gross Enrolment Rate</td>
</tr>
<tr>
<td>HIPEC</td>
<td>Highly Indebted Poor Countries</td>
</tr>
<tr>
<td>HIV</td>
<td>Human Immuno-deficiency Virus</td>
</tr>
<tr>
<td>MDGs</td>
<td>Millennium Development Goals</td>
</tr>
<tr>
<td>MISA</td>
<td>Minimum Income for School Attendance</td>
</tr>
<tr>
<td>MKUKUTA</td>
<td><em>Makati wa Kukuza Uchumi na Kuondoa Umaskini Tanzania</em> (National Strategy for Growth and Reduction of Poverty)</td>
</tr>
<tr>
<td>MM</td>
<td>Manpower Management (Officer)</td>
</tr>
<tr>
<td>MMU</td>
<td><em>Mkurugenzi Mafunzo ya Ualimu</em> (Director of Teacher Education)</td>
</tr>
<tr>
<td>MOEC</td>
<td>Ministry of Education and Culture</td>
</tr>
<tr>
<td>MOEVT</td>
<td>Ministry of Education and Vocational Training</td>
</tr>
<tr>
<td>MOF</td>
<td>Ministry of Finance</td>
</tr>
<tr>
<td>NEPAD</td>
<td>New Partnership for Africa's Development</td>
</tr>
<tr>
<td>NER</td>
<td>Net Enrolment Rate</td>
</tr>
<tr>
<td>NSGRP</td>
<td>National Strategy for Growth and Reduction of Poverty</td>
</tr>
<tr>
<td>OC</td>
<td>Other Charges</td>
</tr>
<tr>
<td>OLS</td>
<td>Ordinary Least Squares (method)</td>
</tr>
<tr>
<td>PAF</td>
<td>Performance Assessment Framework</td>
</tr>
<tr>
<td>PEDP</td>
<td>Primary Education Development Plan</td>
</tr>
<tr>
<td>PETS</td>
<td>Public Expenditure Tracking Survey</td>
</tr>
<tr>
<td>PMO-RALG</td>
<td>Prime Minister's Office, Regional Administration and Local Government</td>
</tr>
<tr>
<td>PO-RALG</td>
<td>President’s Office, Regional Administration and Local Government</td>
</tr>
<tr>
<td>PSLE</td>
<td>Primary School Leaving Examination</td>
</tr>
<tr>
<td>PTR</td>
<td>Pupils-Teacher Ratio</td>
</tr>
<tr>
<td>REPOA</td>
<td>Research on Poverty Alleviation</td>
</tr>
<tr>
<td>SEDP</td>
<td>Secondary Education Development Plan</td>
</tr>
<tr>
<td>SPSS</td>
<td>Statistical Package for Social Sciences</td>
</tr>
<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
</tr>
<tr>
<td>UNESCO</td>
<td>United Nations Education, Scientific and Cultural Organization</td>
</tr>
<tr>
<td>URT</td>
<td>United Republic of Tanzania</td>
</tr>
<tr>
<td>VEO</td>
<td>Village Executive Officer</td>
</tr>
<tr>
<td>WEO</td>
<td>Ward Executive Officer</td>
</tr>
</tbody>
</table>
Abstract

Investing in education is defended for economic and non-economic reasons. Primary education provision is considered as the minimum education needed to equip citizens with skills required in life. It is a human right. It is for this reason that countries invest in primary education.

Tanzania started implementing a comprehensive programme, the Primary Education Development Programme (PEDP) in 2002, designed to improve both access and quality. Due to pressure resulting from high pupils/classroom ratio and high pupils/desk ratio, the government introduced a number of reforms to cope with the situation. One such measure was to introduce a double shift system in government primary schools. Dar es Salaam region was chosen as the pilot region, with the aim of extending to other regions.

This study attempted to analyse the impact of these reforms on quality, with Dar es Salaam region as the case study. The method of analysis included regression analysis and correlation analysis on primary data, covering issues related to learner performance. A comparison of performance is made between government and non-government primary schools.

The findings of the study show no strong evidence of the impact of multiple shifts per se, but rather inadequate attention given to key ratios that improve performance, like availability of enough textbooks and teachers, i.e. implementing different foundation programmes.

In order to safeguard quality, it is recommended that a common foundation programme be defined and implemented, with respect to levels of inputs and cost. In light of the aspirations of Tanzania’s National Strategy for Growth and Reduction of Poverty, provision of universal secondary education is suggested.

Amon Mbelle
2006

Keywords: Tanzania, PEDP, Primary Education Development Plan, primary education, teachers, service delivery, SEDP, Secondary Education Development Plan, financing education, governance.
1 Improving Quality of Human Resources for Growth and Poverty Reduction

1.1 Investing in Education for Economic Growth and Social Stability

Governments in all countries, developed and developing alike, strive to provide education to their citizens with the understanding that education is essential, not only for economic growth, but also for social stability. Primary education has been singled out as the minimum level of education delivery that should be imparted to all citizens, since it at least equips an individual with the basic skills required in life. It is for a similar reason that primary education is advocated as a basic human right. Globally, many initiatives have been taken to ensure universal access coupled with gender parity, quality delivery and completion of a full primary education course. Notable among such initiatives are the Millennium Development Goals (MDGs).

At regional and sub-regional levels, special efforts have also been directed at ensuring achievement of universal primary education. They include the Minimum Income for School Attendance (MISA) initiative in Latin America, the New Partnership for Africa's Development (NEPAD), etc.

In individual countries, primary education has been singled out as an important tool in the fight against poverty, with the strong argument that attainment of education helps in the success of other poverty reduction targets, such as in health, raising incomes, containing HIV and AIDS infections, etc. It is for this reason that primary education has occupied a central role in poverty reduction strategies of many reforming countries.

1.2 Balancing Quantitative (Access) and Qualitative Aspects

Increasing access to education is only one aspect of addressing human resources capacity. It is equally important to ensure that high quality cognitive achievements, skills and values are also attained. Quality aspects in education cover issues such as the adequacy of teaching and learning resources, effectiveness of teachers, relevance of curriculum, efficiency, etc. It is for this reason that aspects of teaching conditions (furniture, learning materials, etc.), have also to be addressed.

1.3 Aiming Beyond Primary Education Provision

Globalisation poses formidable challenges to economies, especially in developing countries. Developments in production and exchange processes have become increasingly knowledge-based, thus challenging such countries to invest beyond primary education in order to realise higher economic and social returns, long run growth and increased productivity. Tilak (2005 for example, found education beyond primary/elementary level to be a significant determinant of the level of development a country can attain.
1.4 Meeting the Challenges of Primary Education Delivery in Tanzania

Tanzania is a country with a long history of efforts towards achieving universal primary education. Comprehensive policies and strategies have been well articulated. Implementation, however, has not been free from problems.

In its efforts to achieve universal primary education, Tanzania implemented a number of initiatives to improve access and quality of delivery, targeting such indicators as teacher-pupil ratios, increasing funding levels, improving the learning environment through provision of adequate and decent seating in class, provision of textbooks, mobilization of external support, relieving the burden borne by parents through abolishing fees, etc. For pupils who are unable to attend mainstream primary education, a programme termed Complementary Basic Education and Training (COBET) has been implemented by the Ministry of Education and Vocational Training (MOEVT) (formerly Ministry of Education and Culture, MoEC).

In late 2001, the efforts to expand access to primary education led to an unprecedented increase of 43% in Standard I enrolment in January 2002. However, new concerns surfaced.

The prime areas of concern have been the issue of efficiency, both cost efficiency and internal efficiency, quality of delivery and the fact that the level of access to a minimum quality programme differs very substantially across schools and districts.

Delivery of education services is, however, not only a function of financial interventions. There are a number of other issues at play, such as governance, cultural issues, technology, etc., which also need to receive adequate attention.

The Ministry of Education and Vocational Training assessed the situation on the ground by conducting school mapping and teacher auditing in order to address these concerns. It was expected, as one of the outcomes, that there would be a nationwide teacher rationalisation in order to reach the recommended pupils-teacher ratio (PTR) of 45:1.

In order to address some aspects of quality, a number of funding schemes are being operated. Most notable are the capitation grant (for capacity building of school committees and teachers in-service training), the investment grant (for construction of classrooms) and block grants to local governments (districts). The block grant, in particular, aims at tilting the balance towards other charges (OC) away from the overwhelming dominance of personal emoluments (at present claiming more than 80%). OC funds quality improvement inputs.

The Government of Tanzania has introduced a ‘formula-based’ system for administering block grants, to take care of deficiencies in the present system, which used no clear formula. The use of ‘number of pupils’ as criterion has been found to be full of flaws. The grant does not clearly reflect needs or demands, but instead it operates on the principle of level of inputs determining level of funding rather than level of demand determining level of funding, which in turn should determine the inputs.
The ‘equality principle’ or ‘equal shares’ dominates most allocations. Such a system poses a fiscal equalisation problem in that it does not adequately take into account the ability of districts to raise money, nor the needs for education delivery, even inspiring districts to look for other sources of revenue. For example, T.Shs. 100 million allocated to each local government translates to a per capita of T.Shs. 80 only for a district with 1.2 million inhabitants (Kinondoni) and T.Shs. 2,200 for one with a population of around 44,000 inhabitants (Pangani).

Tanzania has responded to the challenges of globalisation through articulating, in her National Strategy for Growth and Poverty Reduction (NSGRP/MKUKUTA) (2005-2010), targets to be reached at all levels of education provision by 2010. See Annex 1.

1.5 Research Questions

In order for reforms to deliver, it is imperative that issues of quality, financing and governance be addressed together, as they tend to reinforce each other in a complementary way. A number of issues arise:

- Are reforms in financing alone likely to improve the delivery of primary education services in the absence or near absence of corresponding measures to address governance issues?
- What are the strengths and weaknesses of the present system?
- Are such reforms likely to deliver in terms of access and quality when there is no solid foundation programme on levels of quality, inputs and cost?

1.6 Objective of the Study

This study is intended to assess the impact of reforms that the Government of Tanzania has implemented in order to improve the quality of primary education delivery. The study was guided by the Terms of Reference (Annex 2), and covered Dar es Salaam Region, the pilot case.

1.7 Significance of the Study

Few studies have been undertaken to assess the quality of primary education delivery in the context of recent (post 2000) reforms, e.g. URT (2003d, f; 2005g). These studies, and to the best of our knowledge, others if any, made no in-depth assessment and analysis of impact as is done in this study. In addition, this study links such reforms to performance in examinations. It is hoped that findings from the study will inform policy on corrective measures to take in order to achieve the intended quality improvement.

1.8 Limitations of the Study

This study focuses on quality-related issues only in order to sharpen focus. The choice of Dar es Salaam region was based on it being the only pilot region.
1.9 Layout of the Report

This report is organised into six sections. The introduction is followed in section two by a description of delivery of primary education, focusing on programmes and assessment and in section three by a discussion of salient features of financing of primary education. Section four presents empirical findings based on Dar es Salaam region. Governance issues are highlighted in the fifth section, while concluding remarks cover the last section.
2. **Context: Primary Education Delivery in Tanzania:**

Programmes, Previous Evaluations and the Quest for Universal Secondary Education

The purpose of this section is to explore the peculiarities of primary education delivery in Tanzania, paying particular attention to issues of quality. The section starts with a description of the system and ends with a survey of literature and studies that have evaluated quality aspects.

2.1 **System, Infrastructure and Efficiency**

The overall framework governing delivery of primary education in Tanzania is provided by the 1995 Education and Training Policy (EPT) (URT 1995). For the education system that is overseen by MOEVT, enrolment is dominated by the primary level, which accounts for 87.5%, followed by pre-primary at 6.8%, secondary at 5.3% and teacher education, 0.4%. Primary education is categorised into pre-primary education for young children up to 6 years old, cared for and receiving initial education both at home and in a day-care centre, kindergartens, nursery and other pre-schools. It is a two year cycle. Effective 2007, each primary school is to have a pre-primary class (URT 2005d, i). Primary education takes seven years (Standards I-VII) and is free and compulsory in enrolment and attendance. The major objective of primary education is "to lay the socio-cultural foundation and to prepare every citizen for life long education, training and learning processes" p. 4. In general, the system of education is categorised into formal, vocational and professional, and non-formal.

Public provision of primary education is dominant in Tanzania. According to the latest statistics (URT 2005e), in year 2005, public primary schools had a total enrolment of 7,476,650 pupils (99.1%) out of a total of 7,541,208 pupils enrolled country-wide, while private schools enrolled 64,558 or 0.9%. Gender-wise, males enrolled were 3,855,712 (51.1%) and females 3,685,496 (48.9%). Gross Enrolment Ratio (GER) was 109.9 (111.9 for males and 107.9 for females) while the total Net Enrolment Ratio was 94.8 (95.6 for males and 93.9 for females).

There are marked variations across the twenty-one regions of Mainland Tanzania. With regard to GER, the highest score in 2005 was 129% (Mara region) and the lowest was 81.1% (Dodoma region). The national average was 109.9%. For NER, the highest was 100% (Kilimanjaro, Mara, Mbeya, Mtwara, Mwanza and Tanga regions) and the lowest score was 70.2% (Tabora region), while national average was 94.8%. Gender parity index (females/males) was highest in the Dodoma region (1.01) and lowest in Rukwa and Tabora regions (0.93) compared to a national average of 0.96.

In terms of physical infrastructure, there were 14,257 schools in 2005 (government 14,053 or 98.6%) with a total of 197,377 streams (government 195,424 or 99.0%).
The teacher force was estimated at 135,013 (132,409 or 98.1% in government schools and 2,604 or 1.9% in non-government schools) of whom 64,707 or 47.9% were female (URT 2005e).

The efficiency of primary education measured in terms of cohort wastage raises a number of concerns. For example, the cohort that completed primary education in 2004 reveals that out of 691,982 who enrolled in Standard I in 1998, only 499,241 or 72.1% completed the full cycle of primary schooling, showing wastage of 27.9% (compared to 33% in 2003). Recall that Millennium Development Goal (MDG) two calls for completion of a full course of primary schooling for both girls and boys, by 2015 (UNDP 2003). It is thus of prime importance that the system addresses the issue of dropouts and repeaters with the same vigour and rigour that it addresses access and quality.

The ‘Primary School (Compulsory Enrolment and Attendance) Rules 2002’ issued in June 2002 make it a criminal offence for parents/guardians to fail to enrol seven year olds into Standard I and to allow a pupil to drop out before completion of the full primary cycle. The prescribed sentences are a fine of T.Shs. 30,000 (about half a minimum monthly salary in civil service) to T.Shs. 50,000 (approximately USD 30 to USD 50), or a jail sentence of between 6 and 9 months, or both, for non-enrolment and a fine of T.Shs. 50,000 to T.Shs. 100,000 (approximately USD 50 to USD 100) or jail sentence of 6 to 9 months, or both, for the second offence. Ward Executive Officers (WEOs) and Village Executive Officers (VEOs) are the implementers of this law.

One issue that has to be more carefully examined, is whether rules and regulations and their attendant sentences alone can address the cohort wastage in primary education. The very fact that it has continued even within the operation of this rule, points to the fact that the measure can not address wastage effectively. A wider approach is needed. This could form a subject of research beyond the scope of the present study.

2.2 Measures to Improve Access

The government started implementing a five year Primary Education Development Plan (PEDP) (2002-2006) with the aim of ensuring that children, especially girls in difficult circumstances, have access to and complete good quality, free and compulsory primary education. PEDP represents efforts to integrate Tanzania’s Education and Training Policy, Education Sector Development Programme, Local Government Reform Programme, Development Vision 2025, Poverty Reduction Strategy and the international goals of Education For All (EFA) and Millennium Development Goals (MDGs) into a comprehensive programme. Both access and quality are addressed.

The PEDP framework has four components:

(i) Enrolment expansion

The issues addressed are admission targets and strategies (abolish fees, scholarships for disadvantaged children including AIDS orphans, public campaigns, etc.) new
teacher recruitment targets, out-of-school children and youth and construction of new classrooms.

(ii) Improving quality of teaching and learning processes
Programmes include human resources (pre-service and in-service teacher training) and availability of teaching conditions such as furniture and learning materials.

(iii) Capacity building within the education system and private sector
Components in this category include pre-service teacher training, governance and financial management and developing an Educational Management Information System (EMIS).

(iv) Strengthening institutional arrangements that support the planning and delivery of education. The various roles of institutions that comprise the education system have been spelt out, in terms of administrative arrangements and institutional responsibilities right from school and village level through to ward level, district/urban authority level, regional level and the key Ministries: MOEVT and PMO-RALG (formerly PO-RALG). PEDP has to be seen within the context of the education sector development programme.

There was a marked increase in Standard I enrolment in 2002 when PEDP was introduced (Table 2.1) due to a combination of deliberate expansion of infrastructure (constructing more classrooms), abolition of fees and other forms of parental contributions and increased teacher recruitment. The decrease in Standard I enrolment after 2002 is due to the fact that even over-age children were enrolled in 2002 due to unfounded worries by some parents who thought PEDP was a one year programme.

Table 2.1: Enrolment in Primary Schools in Tanzania: 2000-2005

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard I</td>
<td>897,595</td>
<td>1,140,554</td>
<td>1,632,141</td>
<td>1,481,354</td>
<td>1,368,315</td>
<td>1,348,437</td>
</tr>
<tr>
<td>% change</td>
<td>-</td>
<td>+27.1</td>
<td>+43.1</td>
<td>-9.2</td>
<td>-7.6</td>
<td>-1.4</td>
</tr>
<tr>
<td>Stds I-VII</td>
<td>4,382,410</td>
<td>4,846,185</td>
<td>5,972,077</td>
<td>6,562,772</td>
<td>7,083,063</td>
<td>7,541,208</td>
</tr>
<tr>
<td>% change</td>
<td>-</td>
<td>+10.6</td>
<td>+23.3</td>
<td>+9.9</td>
<td>+7.9</td>
<td>+6.5</td>
</tr>
</tbody>
</table>

Source: URT (2005e)

The first phase of PEDP programme ended in 2006. The programme has been extended for four more years, 2007-2011, with elaborate projections of enrolment, required inputs, “supporting” pre-primary class as well as financial implications (URT 2005h, i).
The NSGRP puts great emphasis on increasing access (see Annex 1), with targets set for all levels of education delivery with the goal of “ensuring equitable access to quality primary and secondary education for boys and girls, universal literacy among men and women and expansion of higher, technical and vocational education” p.35 (goal 1, cluster two: Improvement of Quality of Life and Social Well Being)

2.3 Measures to Improve Quality (Literature Survey)

Expansion of enrolment at as fast a rate as Tanzania did between 2001 and 2002, is likely to compromise quality. UNESCO (2000) delineates teaching and learning conditions which have a bearing on quality as:

1. Learner background (gender, age, home language).
2. Home background (distance to school, meals received, parents in the home).
3. Home learning support (assistance on homework, activities other than school related work, parent education).
4. Teacher background (age, gender, training, experience).
5. Teaching conditions (furniture, learning materials, availability of chalk boards and chalk).
6. Teachers' work environment and activities (availability of teacher resources, teacher activity after school).
7. School head background (gender, qualifications, experience).
8. School characteristics (school safety, school size, school shifts, school facilities – buildings, amenities).

An analysis of nine countries (Botswana, Madagascar, Malawi, Mali, Mauritius, Morocco, Senegal, Uganda and Zambia) was made in order to associate learner performance (scores) with those eight variables. Countries which performed well were associated with high attainments in these variables. The findings revealed that issues that had a bearing on quality are teacher background, teaching conditions, teachers' work environment and activities, and school characteristics.

An example of one effect is that of limited available space. To circumvent the problem, countries resorted to multiple school shifts with seven of the nine countries opting for triple/multiple shifts. It was found that multiple shift puts enormous strain on both learners and teachers, depending on the shifts to which they are allocated. It also limits possibilities for extra-curricular activities. (UNESCO, ibid).
In Tanzania, the issue of quality in primary education delivery was integrated in PEDP at the on set. Three components were targeted:

(i) Improving teachers’ teaching styles and methods in the classroom (up-grading and professional development of teachers, tutors, inspectors etc.).

(ii) Ensuring the availability of good quality learning and teaching materials (textbooks etc.).

(iii) Ensuring the necessary support for maintaining educational standards.

The main strategy for achieving quality improvement was to introduce “a reliable income stream for essential non-salary expenses at school level” (PEDP document). (See Section 3). NSGRP articulates a number of measures for quality delivery at all levels of education. These are:

- Quality pre-primary programmes that link with existing early childhood provision.
- High quality, child-friendly and gender-sensitive primary education through ensuring adequately trained teachers, a textbook ratio of 1:1, full funding of capitation grant.
- High quality secondary education through strengthening school inspectorate services, equitable deployment of competent and motivated teachers and a textbook ratio of 1:1.
- Improved quality and efficient provision of education for higher and technical education institutions through staff development.

2.4 Assessment of Quality Improvement

One of the outcomes of quality improvement is learner performance. Two comprehensive studies have been undertaken to assess quality of primary education delivery in Tanzania since PEDP commenced (URT 2003d and URT 2003f).

Monitoring the Quality Improvement of Primary Education

This study was concluded in October 2003, by the then MoEC (now MoECVT), following a country wide monitoring exercise carried out a month earlier, focusing on the effectiveness of the education materials procurement system and human resource development. A total of 113 local government authorities were covered and questionnaires were the main instrument of collecting data. Main findings on quality aspects included:

- Book/pupils ratio was still above target of 1:3 with varying ratios across subjects.
- Supply of other learning materials fell short of demand.
- There were shortages of books in some schools and surpluses in others.
- Remarkable teacher self- advancement was made.
There was still a shortage of teachers in many schools.

Out of 812 schools, only 234 (28.8%) had libraries.

**Joint Review of the Primary Education Development Plan (PEDP) (2003 and 2004)**

This study reviewed five aspects: access, quality, finance/resources, institutional arrangements and cross-cutting issues. The methodology employed included a review of official documents, observations, informal interactions and visits to three regions (Arusha, Lindi and Singida). Main findings on quality aspects:

- Less than budgeted funds were remitted to schools for purchase of teaching and learning materials.
- Pupil textbook ratio was higher than target.
- There was shortage of other teaching and learning aids or supplementary reading materials.
- Shortage of desks and classroom furniture was still a major constraint to quality learning.
- There was a stark contrast of school environment ‘PEDP classrooms’ versus ‘non PEDP classrooms’ constructed earlier.

**Other Evaluations**

There have been a number of other initiatives to assess PEDP, both by government and non-government actors. These initiatives include a PEDP Implementation Stocktaking Report (2002), the PEDP National Monitoring Report (2002 and 2004) by PO-RALG, and the Public Expenditure Tracking Study (PETS) 2004 and Education Sector Performance Assessment Framework (PAF).

There is general agreement that PEDP has greatly improved access. With regard to quality, some efforts have been made, with tangible results, although there is still room for improvement. There are further suggestions to improve on the indicators for monitoring quality.

**Performance in Examinations**

There have been marked improvements in performance as shown in Table 2.2. In particular, the performance in 2004 was better than in the previous two PEDP years (and even better in 2005). This is attributed to improved school buildings and an improved supply of textbooks and teaching and learning materials.
Table 2.2: Tanzania: Percentage of Pupils Who Passed Std. VII Exams, 2000-2006

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Pupils Who Passed</th>
<th>Percent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>85,576</td>
<td>22.0</td>
</tr>
<tr>
<td>2001</td>
<td>127,351</td>
<td>28.6</td>
</tr>
<tr>
<td>2002</td>
<td>133,674</td>
<td>27.4</td>
</tr>
<tr>
<td>2003</td>
<td>196,291</td>
<td>40.1</td>
</tr>
<tr>
<td>2004</td>
<td>243,043</td>
<td>48.6</td>
</tr>
<tr>
<td>2005</td>
<td>305,062</td>
<td>61.8</td>
</tr>
<tr>
<td>2006</td>
<td>468,279</td>
<td>70.5</td>
</tr>
</tbody>
</table>

Source: URT (2004f and 2005j)

**Gender Perspective of Performance in Standard VII Examinations**

One of the problems that has been plaguing primary education delivery in Tanzania for a long time, is the low performance of girls. This trend was reversed in 2004 (for the first time since the establishment of the National Examinations Council in 1973, URT 2004f). This was attributed to the creation of a more girl-friendly school environment and special encouragement to female pupils.

Table 2.3: Performance in Std. VII Exams by Gender, 2002 - 2005

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Candidates</th>
<th>Passed</th>
<th>Percent Passed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males</td>
<td>Females</td>
<td>Total</td>
</tr>
<tr>
<td>2002</td>
<td>241,810</td>
<td>250,662</td>
<td>492,472</td>
</tr>
<tr>
<td>2003</td>
<td>243,965</td>
<td>246,053</td>
<td>490,018</td>
</tr>
<tr>
<td>2004</td>
<td>248,721</td>
<td>250,520</td>
<td>499,241</td>
</tr>
<tr>
<td>2005</td>
<td>253,280</td>
<td>240,666</td>
<td>493,946</td>
</tr>
</tbody>
</table>

Source: URT (2004f and 2005j)

**Performance by Regions**

Ranking of regions is done for pupils who passed. The rank is determined through considering passes at A(121-150), B(91-120) and C(65-90) only. D(31-64) and E(0-30) are fail grades.
Table 2.4: Tanzania: PSLE Results: Best Five Regions 2001-2005

<table>
<thead>
<tr>
<th>Rank</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dar es Salaam</td>
<td>Dar es Salaam</td>
<td>Mbeya</td>
<td>Mara</td>
<td>Kilimanjaro</td>
</tr>
<tr>
<td>2</td>
<td>Lindi</td>
<td>Mbeya</td>
<td>Mtwara</td>
<td>Kilimanjaro</td>
<td>Mara</td>
</tr>
<tr>
<td>3</td>
<td>Iringa</td>
<td>Lindi</td>
<td>Kilimanjaro</td>
<td>Dar es Salaam</td>
<td>Dar es Salaam</td>
</tr>
<tr>
<td>4</td>
<td>Ruvuuma</td>
<td>Iringa</td>
<td>Kagera</td>
<td>Mbeya</td>
<td>Mbeya</td>
</tr>
<tr>
<td>5</td>
<td>Dodoma</td>
<td>Mwanza</td>
<td>Mwanza</td>
<td>Mwanza</td>
<td>Arusha</td>
</tr>
</tbody>
</table>

Sources: URT (2004f and 2005j)

Table 2.4 shows the ranking of the first five best regions. We include a pre-PEDP year for reference purposes. Dar es Salaam region was chosen as the pilot region for testing the effects of accommodating rapid expansion of enrolment, through introducing a double shift system. This was done for government schools only.

In 2003, Dar es Salaam region, which had maintained first position as best performer for past seven years, was not among the top five best performers. In fact, none of the region’s districts was among the best five performers. Neither was any government primary school in the region among the best ten schools in the country. Dar es Salaam region resurfaced among the five best performers in 2004 and 2005, after concerted political mobilisation to address the situation, mostly through improvement of classrooms, recruitment of more teachers and the procurement of more learning materials, including text books. This, however, conceals a number of facts. According to both the 2004 and 2005 results, none of the three districts of Dar es Salaam was among the best five city/municipal/town districts, nor was any school among the best ten performers. As far as passing is concerned, while Mara and Kilimanjaro regions recorded passes of 50.49% and 50.26% respectively in 2004 and 56% and 62.4% respectively in 2005, for Dar es Salaam it was 46.35% for 2004 and 54.8% for 2005. This raises a number of concerns with two possible explanations: adverse impact of the pilot programme, or that due to PEDP, quality improvement interventions country wide (e.g. provision of books etc.), depleted the advantage Dar es Salaam region used to get, given its proximity to the centre of decision making. These issues are investigated in section four.

2.5 The Case for Universal Secondary Education

As noted earlier, the importance of secondary education cannot be over emphasized. Adequate investment in education, and in secondary school education in particular, is necessary for higher levels of economic growth and productivity. The benefits of secondary education can be gauged through different routes. For example, secondary education is a bridge towards tertiary and higher education. It also helps to absorb primary school leavers, and therefore, its expansion increases chances for others at primary school level.
Among other factors, the much-expanded primary education base, through implementation of PEDP and improved performance at the primary school level, has been exerting pressure at the much higher levels namely, secondary and higher education. To a larger extent, this is what necessitated the Secondary Education Development Plan (SEDP) in Tanzania. See Annex III.
3. Financing Primary Education in Tanzania

In this section we discuss the issue of financing primary education in recent years. The discussion will also highlight PEDP financing.

3.1 Resource Framework

Spending on education is influenced by the macro-economic resource framework that is a component of the government budget frame (accounting format). These two provide guidelines on government spending in the next financial year.

### Table 3.1: Actual Central Government Expenditure - 2000/01-2004/05 (T.Sh. Billion)

<table>
<thead>
<tr>
<th></th>
<th>2000/01</th>
<th>2001/02</th>
<th>2002/03</th>
<th>2003/04</th>
<th>2004/05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Expenditure Including CFS</td>
<td>1,626.50</td>
<td>2,091.10</td>
<td>2,607.2</td>
<td>3,347.5</td>
<td></td>
</tr>
<tr>
<td>Total Expenditure Excluding CFS</td>
<td>964.7</td>
<td>1,296.10</td>
<td>1,787.40</td>
<td>2,198.6</td>
<td>2,866.4</td>
</tr>
<tr>
<td>Total Expenditure in Priority Sectors*</td>
<td>761.9</td>
<td>973.8</td>
<td>1,130</td>
<td>1,473.0</td>
<td></td>
</tr>
<tr>
<td>% of Expenditure excluding CFS</td>
<td>52.4</td>
<td>58.8</td>
<td>54.5</td>
<td>51.4</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>254.9</td>
<td>344.9</td>
<td>436.2</td>
<td>502.3</td>
<td>581.4</td>
</tr>
<tr>
<td>% of Total excluding CFS</td>
<td>26.7</td>
<td>26.6</td>
<td>24.4</td>
<td>22.8</td>
<td>20.3</td>
</tr>
<tr>
<td>% of Priority Spending excl. CFS</td>
<td>51</td>
<td>45.3</td>
<td>44.8</td>
<td>44.5</td>
<td>39.5</td>
</tr>
<tr>
<td>Total Recurrent Expenditure Less CFS</td>
<td>668.5</td>
<td>951.4</td>
<td>1,286.5</td>
<td>1,391.2</td>
<td>1,974.8</td>
</tr>
<tr>
<td>Recurrent Expenditure in Priority Sectors</td>
<td>351.6</td>
<td>497.6</td>
<td>724.6</td>
<td>836.8</td>
<td>965.7</td>
</tr>
<tr>
<td>Education</td>
<td>189.2</td>
<td>282.1</td>
<td>422.9</td>
<td>471.1</td>
<td>501.4</td>
</tr>
<tr>
<td>% of Total Recurrent</td>
<td>28.3</td>
<td>29.7</td>
<td>32.8</td>
<td>33.9</td>
<td>23.4</td>
</tr>
<tr>
<td>% of Priority Spending</td>
<td>53.8</td>
<td>56.7</td>
<td>58.4</td>
<td>56.3</td>
<td>51.9</td>
</tr>
<tr>
<td>Total Development Expenditure</td>
<td>286.2</td>
<td>344.6</td>
<td>500.9</td>
<td>807.4</td>
<td>891.9</td>
</tr>
<tr>
<td>Development Expenditure in Priority Sectors</td>
<td>147.9</td>
<td>264.3</td>
<td>249.1</td>
<td>293.3</td>
<td>507.3</td>
</tr>
<tr>
<td>Education</td>
<td>65.7</td>
<td>62.8</td>
<td>13.3</td>
<td>31.3</td>
<td>80.0</td>
</tr>
<tr>
<td>% of Total Development Spending</td>
<td>23.0</td>
<td>18.2</td>
<td>2.7</td>
<td>3.9</td>
<td>9.0</td>
</tr>
<tr>
<td>% of Priority Spending</td>
<td>44.4</td>
<td>23.8</td>
<td>5.3</td>
<td>10.7</td>
<td>15.8</td>
</tr>
</tbody>
</table>

Note: CFS = Consolidated Fund Services which includes commitments by donors

* Concept redundant effective 2005/06 in favour of outcomes in NSGRP

Source: Abridged from URT (2004a and 2005c, percentages computed)

As depicted in Table 3.1, government expenditure on education increased in recent years (in nominal terms). The share of education spending averaged around 20 percent of total government spending and 29.6% of recurrent spending for the period 2000/01 to 2004/05.
Much of education spending is recurrent. The declining share in development spending from 2002/03 is due to the fact that much of the financing is within the PEDP context, which is mainly externally financed and hence not reflected.

The priority given to education at the national level is also reflected at the sectoral level, where primary education has the highest allocation, as shown in Table 3.2

Table 3.2: Primary Education Funding in Tanzania: 2000/01 – 2006/07 (Actual)

<table>
<thead>
<tr>
<th></th>
<th>2000/01</th>
<th>2001/02</th>
<th>2002/03</th>
<th>2003/04</th>
<th>2004/05</th>
<th>2005/06</th>
<th>2006/07</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total spending</td>
<td>144,656</td>
<td>236,618</td>
<td>289,718</td>
<td>361,425</td>
<td>322,196</td>
<td>418,461</td>
<td>618,438</td>
</tr>
<tr>
<td>(T. Shs. million)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>As % of education spending</td>
<td>66.4</td>
<td>69.0</td>
<td>73.0</td>
<td>74.1</td>
<td>63.8</td>
<td>62.5</td>
<td>64.5</td>
</tr>
<tr>
<td>Share of GDP</td>
<td>2.2</td>
<td>2.9</td>
<td>3.7</td>
<td>3.1</td>
<td>2.5</td>
<td>2.6</td>
<td>3.5</td>
</tr>
<tr>
<td>GDP (T. Shs. billion)</td>
<td>6,664</td>
<td>8,285</td>
<td>8,618</td>
<td>11,504</td>
<td>12,734*</td>
<td>15,912,941</td>
<td>17,864,137</td>
</tr>
</tbody>
</table>

Note: * = estimated

Source: URT (2005b, e), Share of GDP computed.

One encouraging aspect of primary spending is the increasing share of the GDP being devoted to it. This compares very favourably with countries in the region such as Kenya, 2.8% and Lesotho, 3.2% (see also Mbelle 2002).

The structure of spending on primary education is in favour of Personal Emolument which, during 2002/03 for example, claimed 80.8% compared to 19.2% for Other Charges as seen in Figure 3.1.

Figure 3.1: Structure of PEDP Expenditure

Source: URT (2005i)
3.2 Financing of Primary Education in the Context of PEDP

The source of PEDP funds are domestic revenue, donors (credit from the World Bank, Pooled Fund) and communities. The share of external funding has increased over time, calling into question the issue of sustainability.

![Figure 3.2: Domestic and External Financing of PEDP](image)

Source: URT (2005i)

Approved budget has, in general, been below requested allocation. For the period 2001/02 to 2004/05, out of a total of T.Shs 1,331,545 million requested, only T.Shs 1,149,265 was granted, representing a success rate of 86.3% (URT 2005h).

3.3 Targeting Quality Improvement in the Use of PEDP Funds

According to PEDP guidelines, (URT 2001b) one of the measures aimed at quality improvement, was to introduce a reliable income stream for essential non-salary expenses at school level nation wide, effective January 2002. A capitation grant, equivalent to US$ 10 per enrolled pupil, was to be administered. Use of the grant was to be governed by the following formula: US$ 4 (40%) for acquisition of textbooks and other teaching and learning materials. US$6 (60%) to be disbursed to schools through district councils. School Committees are to decide on how best to use the funds. A recommended ratio is US$ 2(20%) for repair of facilities; US$ 2 (20%) for administration materials; US$ 1 (10%) for school – based examinations and US$ 1 (10%) for purchase of chalk, pencils and pens.

Apart from the capitation grant, there are two other forms of funding the PEDP. An investment grant, which is mainly donor funded, is used for funding the construction of new classrooms. An equalisation grant, issued as subventions to local councils, was replaced in July 2004 by a formula- based grant, based on net enrolment.
4 Assessment of Quality-Improvement Reforms: 
Empirical Evidence from Dar es Salaam Region

In this section, we report the results of the analysis of impact of reforms aimed at improving the quality of delivery of primary education services, with particular reference to Dar es Salaam region.

4.1 Sampling and Sample Size

As pointed out earlier, Dar es Salaam region was chosen mainly for the fact that the region was the first to implement the reforms on a pilot basis. Findings from an analysis of the reforms can inform policy in terms of improving the situation in the Dar es Salaam region and/or extending the good experiences to other regions.

Though the study started with the ambitious aim of covering all the schools in the region, many intervening factors set a limit. We were, however, able to cover 138 schools out of a total of 285 schools (48.4%). It was found that no new information was being generated as we approached the total population.

Information was also sought from teachers, to solicit their views in order to complement the general information on schools. A total of 123 teachers were interviewed. Opinions of pupils were also sought, a total of 121. The respondents were randomly selected. For each group a different questionnaire was administered.

4.2 Sample Characteristics

Characteristics of Dar es Salaam with Respect to Primary Education Delivery

Table 4.1 overleaf shows characteristic features of Dar es Salaam region, compared to the national average for 2003, the year of reference.
### Table 4.1: Dar es Salaam: Selected Characteristics of Primary Education Delivery 2003

<table>
<thead>
<tr>
<th>Category</th>
<th>Dar es Salaam</th>
<th>Total Mainland</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Enrolment Standard 1-7</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>193,182</td>
<td>3,182,442</td>
<td>6.1</td>
</tr>
<tr>
<td>Total</td>
<td>386,683</td>
<td>6,531,769</td>
<td>5.1</td>
</tr>
<tr>
<td><strong>Number of Primary Schools</strong></td>
<td>285</td>
<td>12,649</td>
<td>2.3</td>
</tr>
<tr>
<td><strong>Number of Streams</strong></td>
<td>8,744</td>
<td>165,667</td>
<td>5.3</td>
</tr>
<tr>
<td><strong>Teaching Staff</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade A Female</td>
<td>3,821</td>
<td>27,027</td>
<td>14.1</td>
</tr>
<tr>
<td>Grade A Male</td>
<td>801</td>
<td>30,517</td>
<td>2.6</td>
</tr>
<tr>
<td>Grade B Female</td>
<td>1,680</td>
<td>23,366</td>
<td>7.2</td>
</tr>
<tr>
<td>Grade B Male</td>
<td>261</td>
<td>26,127</td>
<td>0.9</td>
</tr>
<tr>
<td>Diploma Female</td>
<td>182</td>
<td>593</td>
<td>30.7</td>
</tr>
<tr>
<td>Diploma Male</td>
<td>88</td>
<td>1,312</td>
<td>6.7</td>
</tr>
<tr>
<td><strong>Pupils/Classroom Ratio</strong></td>
<td>113</td>
<td>81</td>
<td></td>
</tr>
<tr>
<td><strong>Pupils/Desk</strong></td>
<td>7</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>Pupils/Teacher</strong></td>
<td>57</td>
<td>57</td>
<td></td>
</tr>
<tr>
<td><strong>Gross Enrolment Rate</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>105.0</td>
<td>98.0</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>106.3</td>
<td>102.3</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>103.6</td>
<td>100.2</td>
<td></td>
</tr>
<tr>
<td><strong>Net Enrolment Rate</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>88.9</td>
<td>83.3</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>90.0</td>
<td>85.1</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>89.4</td>
<td>84.2</td>
<td></td>
</tr>
<tr>
<td><strong>Demand for Classroom Net (%)</strong></td>
<td>42.8</td>
<td>55.4</td>
<td></td>
</tr>
<tr>
<td><strong>Repeaters Std. 1-7</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>3,271</td>
<td>194,064</td>
<td>1.7</td>
</tr>
<tr>
<td>Boys</td>
<td>3,540</td>
<td>194,259</td>
<td>1.8</td>
</tr>
<tr>
<td><strong>Ratio of Repeaters to Enrolment (%)</strong></td>
<td>0.1</td>
<td>5.9</td>
<td></td>
</tr>
<tr>
<td><strong>Drop-outs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>1,230</td>
<td>19,394</td>
<td>6.3</td>
</tr>
<tr>
<td>Boys</td>
<td>1,415</td>
<td>22,160</td>
<td>6.4</td>
</tr>
<tr>
<td><strong>Ratio of Drop-outs to Enrolment (%)</strong></td>
<td>0.7</td>
<td>0.6</td>
<td></td>
</tr>
</tbody>
</table>

Source: URT (2003b), percentages computed
Pressure to embark on reforms was built by three indicators shown in Table 4.1: pupils/classroom ratio, a large, unsatisfied demand for classrooms and pupils/desk ratio.

**Characteristics of Sampled Schools**
By districts: Kinondoni 69.6%; Ilala 13.0%; Temeke 17.4%
Female pupils per school (2003): lowest 154, highest 1,936
Male pupils per school (2003): lowest 211, highest 1,894
Total pupils per school (2003): lowest 365, highest 3,830
Schools involved in double shift teaching 65.2%.
Schools without syllabus (number): 1

**Quality Aspects (2003)**
1. Students/Teacher ratio
   Highest value 64, lowest value 33
2. Kiswahili books/Students ratio
   Highest value 12, lowest value 0
3. English books/Students ratio
   Highest value 12, lowest value 0
4. Science books/Students ratio
   Highest value 12, lowest value 0
5. Math books/Students ratio
   Highest value 12, lowest value 0
6. Handcraft books/Students ratio
   Highest value 12, lowest value 0
7. Arts books/Students ratio
   Highest value 12, lowest value 0
8. Other books/Students ratio
   Highest value 12, lowest value 0
9. Percent of students who passed
   Highest value 0.05, lowest value 0
10. Percent of girls who passed
    Highest value 1.0, lowest value 0
11. Proportion of Grade A teachers
    Highest value, 49, lowest value 4
12. Proportion of female Grade A teachers out of Grade A
    Highest value 0.92, lowest value 0.38
13. Proportion of female teachers out of total
    Highest value 0.95, lowest value 0.4
4.3 Method of Analysis

Information gathered was analysed using the Statistical Package for Social Sciences (SPSS) computer software for tabulations and cross tabulations, and regression analysis using the Ordinary Least Squares (OLS) method, chosen for its wide use and simplicity. Cross sectional analysis was done.

4.4 Results – Regression Analysis and Correlation Analysis

Regression Analysis

Our analysis was intended to assess the relative importantce of the ‘factors of quality’ as discussed in Section 2. Table 4.2 reports results.

<table>
<thead>
<tr>
<th>Variables</th>
<th>t-statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>2.62</td>
</tr>
<tr>
<td>Teachers/pupils ratio</td>
<td>-2.49*</td>
</tr>
<tr>
<td>Whether school is double-shift</td>
<td>-.125</td>
</tr>
<tr>
<td>Kiswahili books/pupils ratio</td>
<td>-2.343*</td>
</tr>
<tr>
<td>English books/pupils ratio</td>
<td>0.665</td>
</tr>
<tr>
<td>Science books/pupils ratio</td>
<td>0.437</td>
</tr>
<tr>
<td>Handcraft books/pupils ratio</td>
<td>1.064</td>
</tr>
<tr>
<td>Arts books/pupils ratio</td>
<td>-.617</td>
</tr>
<tr>
<td>Other books/pupils ratio</td>
<td>.158</td>
</tr>
</tbody>
</table>

Note: * Significant

R= .844 \quad R-Square .712 \quad Adjusted R-Square .512
Interpretation of Results

Over 70% of performance is explained by the variables analysed. Only two variables, however, are significant: Teacher/pupils ratio and Kiswahili books/pupils ratio. The two variables are correctly assigned the meaning that the smaller the ratio (i.e. more pupils per teacher and more pupils per book), the less the likelihood of passing. In other words, as the ratio tends towards 1:1, the higher the likelihood of passing. One interesting aspect to note (even if not statistically significant), is the influence of different subject textbooks on performance. The implication is that it is not merely availability of books, but which type of books. The double shift system has a negative influence on performance, although it is not statistically significant at conventional test levels.

A test for robustness was carried out, with the exercise yielding no more significant variables.

Correlation Analysis

When more variables were analysed using a correlation matrix, only the Student to Teacher Ratio was significant at 0.05 level (2-tailed Pearson Correlation).

4.5 Teacher Characteristics and Quality

Issues that have a bearing on teaching quality are highlighted in order to reflect on the performance of pupils in the 2003 examinations.

Years of Teaching in Current School (%)

<table>
<thead>
<tr>
<th>Years</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 4 years</td>
<td>56.9</td>
</tr>
<tr>
<td>5 – 10 years</td>
<td>28.5</td>
</tr>
<tr>
<td>6 – 15 years</td>
<td>8.1</td>
</tr>
<tr>
<td>16 – 20 years</td>
<td>4.9</td>
</tr>
<tr>
<td>Over 20 years</td>
<td>1.6</td>
</tr>
</tbody>
</table>

Years of teaching in a current school reflect stability: the more stable, the better the learner achievement. In this case, given a high proportion of teachers having taught up to only four years (56.9%) learner achievement is likely to suffer.

Changes in Workload After Introduction of Double Shift

<table>
<thead>
<tr>
<th>Change</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work load has increased</td>
<td>17.1</td>
</tr>
<tr>
<td>Work load has remained more or less same</td>
<td>7.3</td>
</tr>
<tr>
<td>Work load has decreased</td>
<td>35.0</td>
</tr>
<tr>
<td>Not applicable</td>
<td>40.7</td>
</tr>
</tbody>
</table>

Enough Time to Prepare Lessons

The majority of teachers (61.2%) responded that they didn’t have enough time to prepare lessons.
Private Reading
When probed whether the teacher had enough time for private reading, 63.4% responded that they did not have enough time.

Incentives After Introducing the Double Shift System
Teachers involved in this system were further probed on whether they had received any additional incentives. The majority (58.5%) had not, 4.2% had (question was not applicable to 37.4% of respondents).

Teacher Advancement
There has been a considerable up-grading of teachers since their first graduation. From 99.2% being in the category IIA – IIC and only 0.8% in MMI – MMIII at graduation, the proportion of MMI – MD III reached 48.8% in 2003/04 (I – II: 17.1%; IIA – IIC, 34.1%).

4.6 Pupils’ Perspectives
The following analysis covered responses from pupils on performance and quality.

Position of Pupil in Class After Introduction of Double Shift System
43% of pupils reported improved position in class, with 33.9% retaining more or less the same positions and 23.1% reporting a worsening of performance.

Perceptions of Double Shift System
Girls show more dislike of double shift system than boys do (51.2% against 48.8%). The reasons for such an attitude by both girls and boys, which have a bearing on performance and quality were given as:

- Fewer teachers 5.0%
- Limited time for private study 18.2%
- Limited teaching hours 8.3%
- Fatigue due to hot weather, thus less concentration 19%

(0.8% pointed to transport problems in the afternoon with the question not applying to 48.8% of respondents).

Availability of Textbooks
Pupils who reported improvement form 27.3% while the rest thought availability of textbooks had remained more or less the same (35.5%) or to have decreased (37.2%).

4.7 Suggested Interventions to Improve Delivery
The information presented here summarises issues raised by teachers:

- Increase number of teachers, classes, teaching facilities and materials 42.4%
- Increase teachers’ salaries and other incentives 26.8%
- Provide educational seminars to teachers more often 15.4%
Involve teachers in designing/changing syllabus 8.9%
Increase participation of parents 3.3%
Abolish double shift system 2.4%
No response 0.8%

4.8 Comparison of Performance Between Government and Private Schools

An extension of the analysis to non-government primary schools was done. With regard to overall performance, generally non-government schools performed better. Among the best ten schools in the Dar es Salaam urban area, seven were non-government schools, English medium. The three government schools were not on double shift. For rural Dar es Salaam, only one government school was among the best ten performers. Again, it was running a single shift system.

Analysis of performance using same variables as for government schools was done and the results are reported in Table 4.3.

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>t statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-0.616</td>
</tr>
<tr>
<td>Teachers/pupils ratio</td>
<td>5.469*</td>
</tr>
<tr>
<td>Kiswahili books/pupils ratio</td>
<td>2.006*</td>
</tr>
<tr>
<td>English books/pupils ratio</td>
<td>3.889*</td>
</tr>
<tr>
<td>Science books/pupils ratio</td>
<td>1.915</td>
</tr>
<tr>
<td>Handcraft books/pupils ratio</td>
<td>0.388</td>
</tr>
<tr>
<td>Mathematics books/pupils ratio</td>
<td>9.857*</td>
</tr>
<tr>
<td>Arts books/pupils ratio</td>
<td>1.149</td>
</tr>
<tr>
<td>Other books/pupils ratio</td>
<td>0.288</td>
</tr>
</tbody>
</table>

Note: * = significant
Dependent Variable: Proportion of Students who passed in year 2003

Model Summary


<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.898</td>
<td>.791</td>
<td>.732</td>
</tr>
</tbody>
</table>

Interpretation of the Results:
The independent variables explain over 70% of the changes in performance (passing). The performance of students is mainly explained by the adequacy of teachers, Kiswahili, English and Mathematics books (the statistically significant variables). In non-government schools,
more books and teachers per student were available (ratio approaches 1:1) compared to
the situation in government schools. The implication is that government schools should
address these appropriate ratios in order to improve quality.
5. Governance Issues in Primary Education Delivery in Tanzania

The issue of governance is very broad, ranging from the political and social to economic dimensions. In this section, we highlight management and financial issues related to the delivery of primary education services.

5.1 Good Governance in the Context of Primary Education Delivery

URT (1999) associates good governance with "a system of public management which is transparent, responsive to popular interests, responsible and accountable and where officials in the exercise of public management are capable, efficient, ethical and professional in the interest of the served public" (pp 2-3). Two issues will be discussed here: management and financial issues.

5.2 Participation in Decision Making Concerning Delivery of Primary Education Services

Knowledge of Primary Education Development Programme (PEDP)

Delivery of primary education is guided by this programme. When asked about awareness only 69.1% of the teachers were conversant with PEDP.

Involvement in Decision to Split Classes/Schools

The decision to split classes at the level of individual schools was based on the following criteria:

- Availability of classrooms
- Class size
- Age of pupils
- Gender balance
- Mixing good and bad performers
- Pupils sitting for national examinations to attend morning session

No guidelines had been issued and schools acted differently. The decision on deployment of teachers in the new setting (whether double shift or hiving out a new school from an existing school) was less transparent, with some reporting that the Ward Executive Officer made the selection.

On suggestions for improving primary education delivery, teachers singled out the following issues which reflect participation:

- More involvement of parents in decision making on school matters (3.3%)
- Teachers should be involved in changing syllabus (8.9%)
- Abolition of double shift system (not involved in decision to adopt it) (2.4%)
- Provision of education and seminars to teachers (15.4%)
- Improving teachers' incentives in a participatory way (19.5%)
Management improved greatly in recent years, after the establishment of District Education Boards for monitoring quality of education more closely than was previously the case. At school level, improvement is also expected, as school committees become strengthened.

5.3 Issues of Financial Management

Evidence from the Survey
At the level of the Ministry of Education and Culture, the Report of the Controller and Auditor General (CAG) for each financial year reports on financial governance issues. Bad governance attracts audit queries. CAG has been raising such queries every financial year, implying the need for improving financial management.

Our assessment of primary education financial matters at the school level probed transparency with respect to PEDP funds that reach the school. The responses were as follows:

- Whether the school receives PEDP funds on time: 60.9% responded "Yes" while 39.1% responded "No."
- Whether information on received PEDP funds is displayed on school notice board: all schools responded, "Yes."
- Whether information on expenditure of PEDP funds is shown: 95.7% replied "Yes," and 4.3%, "No."

Evidence from Budget Tracking Studies
Budget tracking addresses the main concern on budget, that of incidence of spending. Public Expenditure Review (PER) is a useful tool in this exercise. A number of budget tracking studies have been carried out on primary education delivery. These include:

1. Price Waterhouse Coopers, 1999, covering three districts, three financial years and two sectors, education and health. The main finding was diversion of OC funds in education by 57%.

2. REPOA and ESRF (2001), covering five districts, four sectors including education for one and a half financial years. The main finding was OC diversion and under reporting.

3. Public Expenditure Tracking Survey (PETS) 2003 focusing on PEDP funds. The study covered six districts, fifteen primary schools. The main finding was that 95% of the capitation grant reached schools.

4. REPOA (2004/05), focusing on primary education development with particular attention to the actual amount of resources disbursed from the center that reaches the school level. Two hundred and ten schools were sampled from 21 districts and seven
regions. The study traced three types of funds: Capitation grant (both the cash and the book part), development grant and capacity building grant for school committees for two years, 2002 and 2003. The main findings were:

- Procedures for disbursing the capitation grant were followed.
- Transfer of the development plan was done in a more orderly way than that of the capitation grant.
- Only 84% of the centrally disbursed development grant reached the targeted recipient.
- At school level, only between 54% and 64% of the disbursed overall capitation grant was received.
- Only 76% to 86% of the cash part of the capitation grant reached school level.
- A paltry 28% of the book part of the capitation grant reached school level.
- There were huge variations in the flow of the per student capitation grant, varying between T.Shs 1,600 and T.Shs 8,700.
- Disbursement of funds involves three ministries, MOVT, MOF and PMO-RALG contrary rules and regulations.
- To sum up, the findings of these studies indicate the need to improve financial management in order to safeguard quality.
6 Concluding Remarks

This section summarizes the main issues raised in this study, as well as bringing up the issue of universal secondary education

6.1 Outstanding Issues in Primary Education Delivery

Cohort Wastage
Cohort wastage is the single most serious problem (URT 2004f). See also section 2.1. As MDG two emphasizes the completion of the full course of primary schooling, the first challenge to the reforms being implemented lies in addressing cohort wastage (drop outs). Having legal instruments in place is a necessary, but not a sufficient, condition.

Insufficiency of Primary Education and the Low Transition Rate to Secondary Level
The challenges of development for a country like Tanzania have assumed new dimensions with knowledge-based, rapid globalisation. It is becoming increasingly apparent that primary education is insufficient to equip citizens with the necessary knowledge to respond to the competitiveness of the 21st century and beyond.

According to official statistics (URT 2004, Table 2.7b, p.26), the transition rate from primary education to secondary education was 31% in 2004, the highest ever for over thirty years.

These two issues have led the government to revisit the education system. Secondary education is now considered to be “vital for sustainable economic take off of the country and has personal and great social benefits crucial for the modernisation and development of the society as a whole” (SEDP, p.i).

6.2 Equity-Quality Trade-off
Reforms intended to improve quality of primary education delivery have to be seen within the context of poverty reduction efforts.

Our analysis of schools in Dar es Salaam revealed differing ‘foundation programmes’ on level of quality, inputs and cost (e.g. pupil-teacher ratios, text book/pupils ratio etc.). In the absence of a well-implemented, common programme, reforms are not likely to deliver. It is thus primarily recommended to define and implement such a programme.

The introduction of the multiple shift system was to be a temporary measure, intended to ease pressure on available physical resources in relation to school demand. While evidence of the negative impact of multiple shift is ambiguous, the key issue, we found, lies in key ratios that improve performance.

In order to improve performance, involvement of key stakeholders in decision making is important, particularly decisions relating to the introduction of reforms and revisiting of the curriculum.
Though recent studies indicate improvements in financial management of PEDP funds, the evidence of small leakages, especially in the book section of the capitation grant, needs to be addressed in order to safeguard quality.

6.3 Need to Increase Access to Quality Secondary Education

The Secondary Education Development Plan has, as its overall goal, an increase in the proportion of Tanzanian youths who complete secondary education with acceptable learning achievements. The target is to increase the transition rate from primary to ordinary secondary level to 40% by 2009. See Annex III.

The National Strategy for Growth and Reduction of Poverty (NSGRP) has identified two operational targets:

- Increased percentage of girls and boys with disabilities and OVCs who qualify for secondary education.
- At least 50% of boys and girls aged 14-17 years will be enrolled in ordinary level secondary schools by 2010.
Bibliography


World Bank (2002). *Tanzania at the Turn of the Century Background Papers and Statistics*.
### Annex I: NSGRP Targets on Education

#### Operational Targets

<table>
<thead>
<tr>
<th>A.</th>
<th>Early Childhood</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Increased number of young children prepared for school and schools prepared to care for children</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B.</th>
<th>Primary Enrolment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2</td>
<td>Increased gross and net enrolment of boys and girls in primary schools from 90.5% in 2004 to 99% in 2010</td>
</tr>
<tr>
<td>1.3</td>
<td>Increased proportion of children with disabilities enrolled, attending and completing school from 0.1% in 2000 to 20% in 2010</td>
</tr>
<tr>
<td>1.4</td>
<td>Increased proportion of orphans and most vulnerable children enrolled, attending and completing primary education from 2% in 2000 to 30% in 2010</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C.</th>
<th>Secondary Enrolment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5</td>
<td>Increased percentage of girls and boys with disabilities and OVCs, who qualify for secondary education, enrol and complete secondary school by 2010</td>
</tr>
<tr>
<td>1.6</td>
<td>At least 50% of boys and girls aged 14-17 years are enrolled in ordinary level secondary schools by 2010</td>
</tr>
<tr>
<td>1.7</td>
<td>At least 60% of girls and boys pass Standard VII examinations by 2010</td>
</tr>
<tr>
<td>1.8</td>
<td>At least 25% of boys and girls are enrolled in advanced level secondary schools by 2010</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D.</th>
<th>Primary Achievement &amp; Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Achieving an average daily attendance in primary schools of at least 85%</td>
</tr>
<tr>
<td>1.2</td>
<td>At least 95% of cohort complete Standard IV</td>
</tr>
<tr>
<td>1.3</td>
<td>At least 90% of cohort completes Standard VII</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>E.</th>
<th>Secondary Achievement &amp; Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.4</td>
<td>At least 70% of girls and boys pass at Division I-III in Form IV examinations</td>
</tr>
<tr>
<td>1.5</td>
<td>Improved learning environment for all children in all schools, with all education institutions safe, violence free, child friendly and gender sensitive</td>
</tr>
<tr>
<td>1.6</td>
<td>Access to and quality of education in Government and Non-Government schools regulated</td>
</tr>
<tr>
<td>1.7</td>
<td>90% of primary and secondary schools have adequate, competent and skilled teachers by 2010</td>
</tr>
<tr>
<td>1.8</td>
<td>Primary and secondary education is of a high quality and promotes the acquisition of critical knowledge, real skills and progressive values</td>
</tr>
</tbody>
</table>

**F. Higher & Technical Education**

| 1.9 | Increased enrolment in higher and technical education in Universities and in Technical Colleges to 30,000 full time students, 10,000 part time, and 15,000 distance learners by 2008. |
| 1.10 | Improved knowledge on entrepreneurial skills amongst youth |

**G. HIV/AIDS**

| 1.11 | Effective HIV and AIDS education and life skills programmes offered in all primary, secondary schools and teachers’ colleges |

**H. Adult & Non-Formal Education & Culture**

| 1.12 | At least 80% of adults, especially women in rural areas, are literate |
| 1.13 | Reduced number of illiterate adults from 3.8 million (2004/05) to 1.5 million (2007/08) |
| 1.14 | Reduced numbers of young people involved in COBET from 234,000 in 2004/05 to 70,566 in 2007/08 |
| 1.15 | Expanded and improved public participation in cultural activities |
| 1.16 | Increased numbers of students/youth who are service orientated |
Annex II: SEDP Targets 2004/05 – 2008/09

SEDP is developed within the broad framework of the Education Sector Development Programme (ESDP) and the Secondary Education Master Plan. The programme has three phases of implementation, each of which runs for five years. The first phase runs from 2004 to 2009.

The overall objective of the plan is to increase the number, and therefore proportion, of the youths in Tanzania who complete secondary education, with acceptable learning outcomes. Thus, in order to achieve the sector’s overall objective, five programmes have been identified and/or designed for implementation within the timeframe of the plan. The five programmes are presented as follows (URT, 2004b):

(a) Improvement of Access: The goal is to reach 50 percent cohort participation and transition rate from primary to secondary education by 2010.

(b) Equity Improvement: The overall goal is to ensure equity of participation in underserved areas by geographical locations, gender and income inequalities.

(c) Performance Improvement: The overall aim is to increase the passing rate of at least Division III from the current 36 percent to 70 percent.

(d) Management Reforms and Devolution of Authority: The overall goal is to increase efficiency and responsiveness in the operation of secondary education.

(e) Education System Management Improvement: The overreaching goal here is to make sure that the Ministry will become more efficient in its core functions of policy formulation, monitoring and evaluation, providing a regulatory framework, coordination, and maximisation of resource use.

(i) Completion of existing two stream schools to four stream schools: Construction/provision of:

(ii) Rehabilitation of 100 old government secondary schools

(iii) Construction of new “O”Level schools

(iv) Construction of new ‘O’ Level Schools
    Construction of extra facilities in schools being up-graded to ‘A’ Level only

(v) Enough teachers deployed to teacher deficient schools by end of 2009

(vi) Excess teachers relocated to schools based on PTR of 1:30 by 2009

(vii) Teaching load of teachers optimised at 30 periods a week or 4 contact hours a day by 2005
(viii) Support to the Non-Government Sector
- Criteria and standards for allocation of capitation grants developed by 2005
- Criteria and prospective providers requesting development grants assessed by 2005
- Capitation grant at the rate of 50 percent of that of government schools provided from 2005 – 2009
- Development grant to providers constructing schools for the disadvantaged groups granted by 2006
- In-service teacher training provided by 2009

(ix) Open and Distance Learning
- Provide capitation grant to IAE to reach 50 percent of target group by 2009

(b) Equity Improvement
- Scholarship for children from poor families increased by 24,000 children by 2005
- Facilities in schools with disabled students improved by 2009
- Hostels constructed in existing secondary schools in nomadic areas by 2009

(c) Quality Improvement
- Reviewed Curriculum in place by 2006
- A National Curriculum and Examination Framework Developed by 2005
- Adequately qualified teachers for all subjects in all schools and colleges by 2009
- Examinations research unit established by 2006
- All teachers re-oriented on review curriculum, assessment and examination by 2007
- Teaching and learning materials annotated list prepared by 2006
- Sufficient textbooks, by subject, provided at a student:book ratio of 1:1 by 2009
- One teacher librarian in every school and college by 2009
- Online teacher training system established in 14 teachers’ colleges by 2007
- In-service training policy and programmes in place by 2008
**Students Performance Improvement**
- All schools to provide lunch by 2005

**Girls' Retention and Achievement**
- Remedial classes for all under-performing girls, in all schools that teach girls, conducted by 2005
- Guidance and counselling services firmly established in all schools by 2006
- Facilities for girls’ privacy in place by 2006
- Improved and expanded TUSEME project in 25 percent of schools by 2009

**(d) Management Reforms**
- TOR of key actors in the devolution reviewed and aligned by the January 2005 process
- Key actors in the devolution process trained by 2006
- Operational Manuals for school management, procurement financial management developed by 2005
- All schools to have their own school development plan by December 2005
- Accountability of heads of schools on reporting lines, terms of recruitment, retention and promotion reviewed by December 2005

**(e) Education System Management Efficiency**
- School inspection professional development plan in place by 2005
- Provision of facilities to all zones in place by 2009
- Capacity building plan for SEDP implementers in place by 2005
- Information Education and Communication (IEC) in place by December 2004
- Develop instruments for SEDP monitoring and evaluation by 2005
- Facilities for EMIS at regions, districts and schools by 2009
Publications by REPOA

Books
"Researching Poverty in Tanzania: problems, policies and perspectives"
Edited by Idris Kikula, Jonas Kipokola, Issa Shivji, Joseph Semboja and Ben Tarimo

“Local Perspectives on Globalisation: The African Case”
Edited by Joseph Semboja, Juma Mwapachu and Eduard Jansen

“Poverty Alleviation in Tanzania: Recent Research Issues”
Edited by M.S.D. Bagachwa

Research Reports

08.4 “Establishing Indicators for Urban Poverty-Environment Interaction in Tanzania: The Case of Bonde la Mpunga, Kinondoni, Dar es Salaam”
Matern A.M. Victor, Albinus M.P. Makalle and Neema Ngware

08.3 “Bamboo Trade and Poverty Alleviation in Ileje District, Tanzania”
Milline Jethro Mbonile

08.2 “The Role of Small Businesses in Poverty Alleviation: The Case of Dar es Salaam, Tanzania”
Raymond Mnenwa and Emmanuel Maliti

08.1 “The Impact of Reforms on the Quality of Primary Education in Tanzania”
Amon V.Y. Mbelle

07.2 “Financing Public Health Care: Insurance, User Fees or Taxes? Welfare Comparisons in Tanzania”
Deograsias P. Mushi

07.1 “Rice Production in the Maswa District, Tanzania and its Contribution to Poverty Alleviation”
Jerry A. Ngailo, Abiud L. Kaswamila and Catherine J. Senkoro

06.3 “The Contribution of Microfinance Institutions to Poverty Reduction in Tanzania”
Severine S.A. Kessy and Fratern M Urio

06.2 “The Role of Indigenous Knowledge in Combating Soil Infertility and Poverty in the Usambara Mountains, Tanzania”
Juma M. Wickama and Stephen T. Mwihomeke

06.1 “Assessing Market Distortions Affecting Poverty Reduction Efforts on Smallholder Tobacco Production in Tanzania”
Dennis Rweyemamu and Monica Kimaro
04.1 "The Use of Sustainable Irrigation for Poverty Alleviation in Tanzania. The Case of Smallholder Irrigation Schemes in Igurusi, Mbarali District”
Shadrack Mwakalilila and Christine Noe

04.2 "Assessing the Relative Poverty of Clients and Non-clients of Non-bank Micro-finance Institutions. The case of the Dar es Salaam and Coast Regions"
Hugh K. Fraser and Vivian Kazi

04.3 "The Role of Traditional Irrigation Systems in Poverty Alleviation in Semi-Arid Areas: The Case of Chamazi in Lushoto District, Tanzania"
Abiud L. Kaswamila and Baker M. Masuruli

04.4 "The Role of Tourism in Poverty Alleviation in Tanzania”
Nathanael Luvanga and Joseph Shitundu

05.1 “Changes in the Upland Irrigation System and Implications for Rural Poverty Alleviation. A Case of the Ndiwa Irrigation System, West Usambara Mountains, Tanzania”
Cosmas H. Sokoni and Tamilwai C. Shechambo

03.1 “School Enrolment, Performance, Gender and Poverty (Access to Education) in Mainland Tanzania”
A.V.Y. Mbelle and J. Katabaro

03.2 “Shortcomings of Linkages Between Environmental Conservation and Poverty Alleviation in Tanzania”
Idris S. Kikula, E.Z. Mnzava and Claude Mung’ong’o

03.3 “Natural Resources Use Patterns and Poverty Alleviation Strategies in the Highlands and Lowlands of Karatu and Monduli Districts – A Study on Linkages and Environmental Implications”
Pius Zebbe Yanda and Ndalahwa Faustin Madulu

03.4 “The Role of Privatisation in Providing the Urban Poor Access to Social Services: the Case of Solid Waste Collection Services in Dar es Salaam”
Suma Kaare

03.5 “Poverty and Changing Livelihoods of Migrant Maasai Pastoralists in Morogoro and Kilosa Districts”
C. Mung’ong’o and D. Mwamfupe

03.7 “Poverty and Environment: Impact analysis of Sustainable Dar es Salaam Project on “Sustainable Livelihoods” of Urban Poor”
M.A.M. Victor and A.M.P. Makalle

03.6 “Access to Formal and Quasi-Formal Credit by Smallholder Farmers and Artisanal Fishermen: A Case of Zanzibar”
Khalid Mohamed

02.2 “The Role of Privatisation in Providing the Urban Poor Access to Social Services: the Case of Solid Waste Collection Services in Dar es Salaam”
Suma Kaare
02.1 “Economic Policy and Rural Poverty in Tanzania: A Survey of Three Regions”
Longinus Rutasitara

01.5 “Demographic Factors, Household Composition, Employment and Household Welfare”
S.T. Mwisomba and B.H.R. Kiilu

01.4 “Assessment of Village Level Sugar Processing Technology in Tanzania”
A.S. Chungu, C.Z.M. Kimambo and T.A.L. Bali

01.3 “Poverty and Family Size Patterns: Comparison Across African Countries”
C. Lwechungura Kamuzora

01.2 “The Role of Traditional Irrigation Systems (Vinyungu) in Alleviating Poverty in Iringa Rural District”
Tenge Mkavidanda and Abiud Kaswamila

01.1 “Improving Farm Management Skills for Poverty Alleviation: The Case of Njombe District”
Aida Isinika and Ntengua Mdoe

00.5 “Conservation and Poverty: The Case of Amani Nature Reserve”
George Jambiya and Hussein Sosovele

00.4 “Poverty and Family Size in Tanzania: Multiple Responses to Population Pressure?”
C.L. Kamuzora and W. Mkanta

00.3 “Survival and Accumulation Strategies at the Rural-Urban Interface: A Study of Ifakara Town, Tanzania”
Anthony Chamwali

00.2 “Poverty, Environment and Livelihood along the Gradients of the Usambaras on Tanzania”
Adolfo Mascarenhas

00.1 “Foreign Aid, Grassroots Participation and Poverty Alleviation in Tanzania: The HESAWA Fiasco”
S. Rugumamu

99.1 “Credit Schemes and Women’s Empowerment for Poverty Alleviation: The Case of Tanga Region, Tanzania”
I.A.M. Makombe, E.I. Temba and A.R.M. Kihombo

98.5 “Youth Migration and Poverty Alleviation: A Case Study of Petty Traders (Wamachinga) in Dar es Salaam”
A.J. Liviga and R.D.K Mekacha

98.4 “Labour Constraints, Population Dynamics and the AIDS Epidemic: The Case of Rural Bukoba District, Tanzania”
C.L. Kamuzora and S. Gwalema

98.3 “The Use of Labour-Intensive Irrigation Technologies in Alleviating Poverty in Majengo, Mbeya Rural District”
J. Shitundu and N. Luvanga

98.2 “Poverty and Diffusion of Technological Innovations to Rural Women: The Role of Entrepreneurship”
B.D. Diyamett, R.S. Mabala and R. Mandara
98.1 “The Role of Informal and Semi-Formal Finance in Poverty Alleviation in Tanzania: Results of a Field Study in Two Regions”
A.K. Kashuliza, J.P. Hella, F.T. Magayane and Z.S.K. Mvena

97.3 “Educational Background, Training and Their Influence on Female-Operated Informal Sector Enterprises”
J. O’Riordan, F. Swai and A. Rugumyamheto

97.1 “Poverty and the Environment: The Case of Informal Sandmining, Quarrying and Lime-Making Activities in Dar es Salaam, Tanzania”
George Jambiya, Kassim Kulindwa and Hussein Sosovele

Special Papers

08.27 “The Growth – Poverty Nexus in Tanzania: From a Developmental Perspective”
Marc Wuyts

08.26 “Local Autonomy and Citizen Participation In Tanzania: From a Local Government Reform Perspective.”
Amon Chaligha

07.25 “Children and Vulnerability In Tanzania: A Brief Synthesis”
Valerie Leach

Idris S. Kikula and Martha A. S. Qorro

07.23 “Guidelines on Preparing Concept Notes and Proposals for Research on Pro-Poor Growth and Poverty in Tanzania”

07.22 “Local Governance in Tanzania: Observations From Six Councils 2002-2003”
Amon Chaligha, Florida Henjewele, Ambrose Kessy and Geoffrey Mwambe

07.21 “Tanzanian Non-Governmental Organisations – Their Perceptions of Their Relationship with the Government of Tanzania and Donors, and Their Role and Impact on Poverty Reduction and Development”

06.20 “Service Delivery in Tanzania: Findings from Six Councils 2002-2003”
Einar Braathen and Geoffrey Mwambe

06.19 “Developing Social Protection in Tanzania Within a Context of Generalised Insecurity”
Marc Wuyts
“To Pay or Not to Pay? Citizens’ Views on Taxation by Local Authorities in Tanzania”
Odd-Helge Fjeldstad

“When Bottom-Up Meets Top-Down: The Limits of Local Participation in Local Government Planning in Tanzania”
Brian Cooksey and Idris Kikula

Odd-Helge Fjeldstad, Florida Henjewele, Geoffrey Mwambe, Erasto Ngalewa and Knut Nygaard

“Poverty Research in Tanzania: Guidelines for Preparing Research Proposals”
Brian Cooksey and Servacius Likwelile

“Guidelines for Monitoring and Evaluation of REPOA Activities”
A. Chungu and S. Muller-Maige

“Capacity Building for Research”
M.S.D. Bagachwa

“Some Practical Research Guidelines”
Brian Cooksey and Alfred Lokuji

“A Bibliography on Poverty in Tanzania”
B. Mutagwaba

“An Inventory of Potential Researchers and Institutions of Relevance to Research on Poverty in Tanzania”
A.F. Lwaitama

“Guidelines for Preparing and Assessing REPOA Research Proposals”
REPOA Secretariat and Brian Cooksey

“Social and Cultural Factors Influencing Poverty in Tanzania”
C.K. Omari

“Gender and Poverty Alleviation in Tanzania: Issues from and for Research”
Patricia Mbughuni

“The Use of Technology in Alleviating Poverty in Tanzania”
A.S. Chungu and G.R.R. Mandara

“Environmental Issues and Poverty Alleviation in Tanzania”
Adolfo Mascarenhas

“Implications of Public Policies on Poverty and Poverty Alleviation: The Case of Tanzania”
Fidelis Mtatifikolo

“Who’s Poor in Tanzania? A Review of Recent Poverty Research”
Brian Cooksey

“Poverty Assessment in Tanzania: Theoretical, Conceptual and Methodological Issues”
J. Semboja

“Changing Perceptions of Poverty and the Emerging Research Issues”
M.S.D. Bagachwa
Project Briefs

Brief 12  Changes in Citizens’ Perceptions of the Local Taxation System in Tanzania

Brief 11  Citizens Demand Tougher Action on Corruption in Tanzania

Brief 10  Outsourcing Revenue Collection: Experiences from Local Government Authorities in Tanzania

Brief 9  Children and Vulnerability in Tanzania: A Brief Overview

Brief 8  Mawazo ya AZISE za Tanzania Kuhusu Uhusiano Wao na Wafadhili

Brief 7  Mawazo ya AZISE za Tanzania Kuhusu Uhusiano Wao na Serikali

Brief 6  Local Government Reform in Tanzania 2002 - 2005: Summary of Research Findings on Governance, Finance and Service Delivery

Brief 5  Children Participating in Research

Brief 4  Changes in Household Non-Income Welfare Indicators - Can poverty mapping be used to predict a change in per capita consumption over time?

Brief 3  Participatory Approaches to Local Government Planning in Tanzania, the Limits to Local Participation

Brief 2  Improving Transparency of Financial Affairs at the Local Government Level in Tanzania

Brief 1  Governance Indicators on the Tanzania Governance Noticeboard Website

TGN1  What is the Tanzania Governance Noticeboard?

LGR 12  Trust in Public Finance: Citizens’ Views on taxation by Local Authorities in Tanzania

LGR 11  Domestic Water Supply: The Need for a Big Push

LGR10  Is the community health fund better than user fees for financing public health care?

LGR 9  Are fees the major barrier to accessing public health care?

LGR 8  Primary education since the introduction of the Primary Education Development Plan

LGR 7  Citizens’ access to information on local government finances

LGR 6  Low awareness amongst citizens of local government reforms

LGR 5  Fees at the dispensary level: Is universal access being compromised?

LGR 4  TASAF – a support or an obstacle to local government reform

LGR 3  Councillors and community leaders – partnership or conflict of interest? Lessons from the Sustainable Mwanza Project
LGR 2  New challenges for local government revenue enhancement

LGR 1  About the Local Government Reform project