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Local Research on the Characteristics of Effective Primary Schools in Singida Tanzania

By

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The document is a working document still in the stages of production. It has been prepared to serve as a basis for discussions at the ADEA Biennial Meeting and should not be disseminated for other purposes at this stage.

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Acronyms and abbreviations

ADEA	Association for the Development of Education in Africa
BEDC	Basic Education Development Committee
CB	Capacity Building
CBOs	Community Based Organizations
CEF	Community Education Fund
CEO	Chief Education Officer
CG	Capitation Grant
CIDA	Canadian International Development Agency
COBET	Complementary Basic Education and Training
D/S	Double Shift
DAO	District Academic Officer
DED	District Executive Director
DEO	District Education Officer
DG	Development Grant
DPE	Director of Primary Education
DPP	Director of Policy and Planning
DPs	Development Partners
DSE	Director of Secondary Education
DTE	Director of Teacher Education
EFA	Education for All
ETP	Education and Training Policy
EMIS	Education Management Information System
ESDP	Education Sector Development Programme
ETP	Education and Training Policy of the United Republic of Tanzania.
GDP	Gross Domestic Product
GER	Gross Enrolment Ratio
GNP	Gross National Product
GoT	Government of Tanzania
HIPC	Highly Indebted Poor Countries
HT	Head teacher
IEC	Information, Education Communication
IFMS	Integrated Financial Management System
INSET	In-Service Teacher Training
IPEC	International Programme for the Elimination of Child Labour
LGA	Local Government Authority
LGAs	Local Government Authorities
LGRP	Local Government Reform Programme
M&E	Monitoring & evaluation
MCDWC	Ministry of Community Development, Women's Affairs and Children
MDG	Millennium Development Goals
MEMKWA	Mpango wa Elimu ya Msingi kwa Watoto Walioikosa
MoEC	Ministry of Education and Culture
MoF	Ministry of Finance
MTEF	Medium-term Expenditure Framework
NECTA	National Examinations Council of Tanzania
NER	Net Enrolment Ratio
NFE	Non-Formal Education
NGO	Non-Governmental Organization

OCs	Other Charges
PBR	Pupils to Book Ratio
PEDP	Primary Education Development Plan
PER	Public Expenditure Review
PSLE	Primary School Leaving Examination
PMO	Prime Minister's Office
PO-RALG	President's Office – Regional Administration and Local Government
PRESET	Pre-Service Teacher Training
PRS	Poverty Reduction Strategy
PSRP	Public Service Reform Programme
PTR	Pupil to Teacher Ratio
RAS	Regional Administrative Secretary
REO	Regional Education Officer
RS	Regional Secretariat
SEDP	Secondary Education Development Plan
TIE	Tanzania Institute of Education
TC	Training Coordinator
TRCs	Teacher Resource Centers
UNESCO	United Nations Educational Scientific and Cultural Organization
UPE	Universal Primary Education
WEC	Ward Education Coordinator

1. ABSTRACT

1. Over the years there is growing concern in Tanzania that many pupils complete primary school without achieving satisfactory levels of learning. Unfortunately, the quality enhancement policies have largely emphasized systemic analyses, and the resultant blanket policy recommendations mainly focus on quantitative rather than qualitative interventions. Often, the programs to implement system-wide policies do not take into account the wide variations in realities among schools. Responses to unique local realities can only be achieved if local educators' organize and reflect on their own experience and use these reflections to design local interventions that will improve pupils' learning. What has been missing is a structured approach that helps local educators analyze and reflect on which school characteristics are most significant for pupils' learning as part of the process of planning and implementing local improvements in teaching and learning.

2. Recognizing this gap, ADEA, MoEC, UNESCO and CIDA financed this local study on 'Characteristics of Effective Primary Schools in Singida Region of Tanzania' which has enabled a team of 19 local educators from the four districts of Singida region to identify priority characteristics that contribute to effective primary schools in their region. The team of local educators designed a thirty-school sample study, defined characteristics to be studied and selected their indicators, designed data collection guides, collected and analyzed the data, and prepared a report that is presented here.

3. The results of the study indicate that primary schools in Singida region are more effective when the teacher (1) motivates pupils for effective learning, (2) has mastery of the content and methodology he/she is teaching, and (3) carries out timely assessment and evaluation of pupils' learning and the head teacher is (4) a role model and (5) there is effective monitoring and supervision of school activities by the head teacher and school administration. The teachers' and head teacher's effectiveness is further enhanced if (6) the school has an adequate infrastructure; (7) there is regular and effective horizontal and vertical communication; and (8) the school administration has the capability to utilize school funds and other materials effectively. The paper concludes with seven recommendations for what may be done in Singida to make these characteristics of schools more effective.

2. EXECUTIVE SUMMARY

4. Over the years there is growing concern in Tanzania that many pupils complete primary school without achieving satisfactory levels of learning and unfortunately, the quality enhancement policies have largely been broad with emphasis on systemic analyses and the resultant blanket policy recommendations that mainly focus on quantitative rather than qualitative interventions. Often, the programs to implement system-wide policies do not take into account the wide variations in realities among schools. Responses to unique local realities can only be achieved if local educators' organize and reflect on their own experience and use these reflections to design local interventions that will improve pupils' learning. What has been missing is a structured approach that helps local educators analyze and reflect on which school characteristics are most significant for pupils' learning as part of the process of planning and implementing local improvements in teaching and learning.

5. Recognizing this gap, ADEA, MoEC, UNESCO and CIDA financed this local study on 'Characteristics of Effective Primary Schools in Singida Region of Tanzania' which has enabled a team of local educators from the four districts of Singida region i.e. Iramba, Singida Rural, Manyoni and Singida Municipal, to identify priority characteristics that contribute to effective primary schools in their region. The main purpose of the study was to identify specific school characteristics in the four districts, which if invested in, could improve pupils' learning. The process of the study also aimed at developing local capacity among local educators for integrated analysis and planning that would sustain effectiveness of primary schools.

6. The methodology used during the study was developed during a study conducted in five districts of western Uganda in 2003/2004 by twenty school heads and teacher supervisors facilitated by two consultants. The study in Tanzania was undertaken by a Team of 19 local researchers (ten head teachers, four Resource Centre Coordinators, one inspector of schools, two tutors from the Teachers' Training Colleges, and two curriculum developers) facilitated by two more experienced researchers, one of who had participated in a similar study in Uganda. Tanzania Institute of Education (TIE) was engaged as a local institution for coordinating and managing the study. In addition, there was a contact person in the Ministry as well as the whole research being coordinated in the Directorate of the Primary Education in the Ministry. The study methodology and process focused on an in-depth qualitative and quantitative analysis of locally identified variables at the school level drawing from the vast experience of the local educators/researchers. Precisely, there were four phases of the study (design workshop, fieldwork, data analysis and report/dissemination workshop).

7. The characteristics to be studied and the indicators for which data was collected were defined during the research design phase by formulating a framework of characteristics that defined an effective school and a data specification forms. Data were collected from thirty schools, 15 of which had good PSLE results and the other 15 had poor results for three consecutive years i.e. 2001, 2002 and 2003. The study took place over a period of five months from September 2005 to January 2006.

8. As can be seen, the districts' and the regional PSLE pass rates over four consecutive years have been well below the national pass rate. As for the completion rate, the national figure was 77% for the year 2004. The figure for the region was also 77% from the regional data of Singida. However, for the sample schools, the completion rate was 86.2%. The explanation for the figure being higher could be attributed to have picked the best fifteen schools out of the whole region in the sample. What goes in the classroom is what then affects the quality of school performance. With regard to transition rates, the national figure for the year 2004 was 36.1%. The regional transition rate was 19.9% for the same year. The sample schools had a transition rate of 35.2%. Still the regional and the sample schools' transition rates are below the national rate.

9. As a result of the data analysis process and drawing from their vast experience, the Research Team identified eight (8) priority characteristics which, if invested in, could be expected to improve pupils' learning in Singida region. These include:
- The head teacher is a role model
- Monitoring and supervision of school activities by the head teacher and school administration
- The teacher motivates pupils for effective learning
- The teacher has mastery of content and methodology he/she is teaching
- The teacher carries out timely assessment and evaluation of pupils' learning
- Adequate school infrastructure
- Effective horizontal and vertical communication by the school administration, and
- School administration's ability to utilize school funds effectively.

10. In the final analysis, the study findings suggest that the 'critical path' of characteristics that can influence PSLE results and other learning outcomes in Singida region is to have teachers who motivate pupils for effective learning. They can do this if they have mastery of the subject matter they teach and of the methodology they use during teaching, particularly those methods that encourage pupils' interaction with different learning resources during the learning process; and if they carry out timely assessment and evaluation of pupils' learning. This largely depends on the head teacher who should be a role model (who is consistent with his/her duties, follows his/her daily school program, has a proper filing system, analyses school-level information and uses it for planning and decision making, is punctual and regular at school, and engages in classroom teaching). The effective monitoring and supervision of school activities by the school administration is also important. The teachers' and head teachers' effectiveness is further enhanced if the school has an adequate infrastructure, there is effective horizontal and vertical communication and school administration has the capability to utilize school funds and other materials effectively.

11. On the basis of the above findings and conclusions the study has made the following recommendations:
- Enhance the school's own pedagogical monitoring and supervision.
- Enhance schools capacity to effectively utilize available text books including other teaching and learning resources by designing strategies that enhance teachers' and pupils' capacity and interest to utilize available text books and other teaching learning resources within and outside the school.
- The impact of participatory teaching and learning methods to improve pupils' performance
- Motivate head teachers and teachers. This can be done by improving their working and living conditions, timely release of their salary, paying double shift teaching and hardship allowances where applicable.
- Develop and implement guidelines that clarify the roles, relationships and linkages among regional stakeholders. This will reduce on the current ambiguity and increase opportunities for collaboration and coordination as a way of establishing an effective system towards improved schools outcomes.
- Reduce overcrowding in classrooms. In the short term, the Regional and District education offices should work out a strategy to speed up the implementation of the double shift system in schools that have overcrowded classes. In the long term plans for splitting overcrowded schools should be developed and implemented.
- Facilitate events that disseminate the study's findings and recommendations.

3.   INTRODUCTION

12. Tanzania government has made significant progress towards the expansion of primary education. The expansion has mainly been in the areas of increasing access through increased enrolment, classroom construction and teacher recruitment and training. The Gross Enrolment rate (GER) increased from 33% in 1970 to 94% in 1981, however, it had dropped to just 62% by 1998. The corresponding Net Enrolment Rate (NER) fell from a peak of 68% in 1991 to just 46% in 1998. With the implementation of PEDP in 2002, the number of children enrolled in primary school increased from about 4.8 million in 2001 to more than 7 million children in 2004. A 44% increase in pupil enrolment in three years. These figures also show that the GER and NER reached 106.3% and 90.5% respectively in 2004. Over 50,000 new classrooms were constructed between 2002 and 2004/5, meaning that the total number of classrooms increased by 83%. By 2004, the number of teachers had increased from 103,731 in 2001 to 119,773 in 2004 giving a pupil teacher ratio of 59:1. The implementation of a double – shift system has served as a stop-gap measure to reduce classroom congestion, to enable more access of available textbooks, and to reduce the pupil-teacher ratio especially within the lower standards (MoEC 2004, Davidson 2004).

13. While there has been considerable success in increasing access to primary education, there has been little focus on the quality of learning taking place in the schools in Tanzania. Over the years there is growing concern that many pupils are not achieving adequate levels of learning and unfortunately, the quality enhancement policies and interventions have largely been broad with emphasis on systemic analyses and the resultant blanket policy recommendations that mainly focus on quantitative rather than qualitative achievements. For example, interventions have encouraged systems to reduce the often very large variations in class size, to make sure all pupils have access to textbooks, and to provide pre and in-service training for teachers. Often, the programs to implement system-wide policies do not take into account the wide variations in realities among schools.

14. Arguably, class sizes in primary schools may be small, but the teachers show up irregularly; textbooks may be in the schools, but the teachers do not use them in the classroom; or teachers may go to courses in their holidays and supervisors may visit them in their classrooms without their teaching changing. Responses to unique local realities can only be achieved if local educators' organize and reflect on their own experience and use these reflections to design local interventions that will improve pupils' learning. Of course, the system needs to empower and finance schools to implement local improvement activities, and this is already happening in Tanzania (provision of capitation and development grants directly to the school).

15. What has been missing is a structured approach that helps local educators analyze and reflect on which current school characteristics and conditions are most significant for pupils' learning as part of the process of planning and implementing local improvements in teaching and learning.

16. Basing on the methodology used to study the critical characteristics of effective primary schools in the Rwenzori region of Uganda, the experience and achievement attained thereof, and in recognition of the efforts being done in Tanzania to improve the quality of education in primary schools, ADEA, in partnership with UNESCO, CIDA and MoEC, commissioned this study in Singida region of Tanzania.

3.1   Purpose and Objectives of the study

17. The main purpose of the study was to identify specific school characteristics that could be used as catalysts for improving pupils' learning outcomes in the Singida region of Tanzania. Specifically, the study had the following objectives:

i) To establish a set of practical priorities at the local level (regional and below) for improving pupils' learning;

ii) To create a cadre of local educators who understand these priorities and who will press locally to pursue their improvement in the area's primary schools;

iii) To provide this cadre of local educators with the skills, experience, and confidence in the methodology that will allow them to continue to analyze the quality of their schools working with other local educators;

iv) To produce a written report on the study of 30-sample schools that can be used locally and as material for discussion and planning nationally and internationally. In this particular case, the report will be one of the case studies to be discussed as part of a synthesis paper at the ADEA Biannual Conference to be held in Gabon in 2006.

3.2   Scope of the Study

18. This study focused on the characteristics of effective primary schools in the Singida region of Tanzania. Data was collected from 30 primary schools in the four districts that make up Singida region. The districts/councils are Iramba, Manyoni, Singida Rural and Singida Municipality. The choice of the study area was based on the considerable challenges the region has and continues to face in improving pupils learning outcomes. For instance, in the 2004 PSLE, the region was last but one in the twenty one regions of the country. Incidentally, no comprehensive study has been conducted in the area on the quality of education as measured through pupils learning outcomes. The performance of primary schools in this region varies greatly, making it crucial to investigate which characteristics contribute the most to pupils' learning.

19. The study used a methodology that focused on an in-depth qualitative and quantitative analysis of locally identifiable variables at the school level. This was corroborated by observations made and recorded during each school visit and a review of the available documents from various sources – government, NGO's and development partners. The framework that guided the study (Chapter 6) and the findings of the study were based on these empirical observations and the data collected from the school visits.

3.3   Organization of the Report

20. The report presents an analysis of characteristics for effective primary schools based on data collected in 30 primary schools in the Singida region of Tanzania. The abstract and executive summary is presented in chapters 1 and 2 respectively. Chapter 3 deals with the general background and introduction of the study. Chapter 4 presents the context of primary education in Tanzania, particularly in the four districts of Singida. Chapter 5 gives the design of the study while chapter 6 focuses on the framework of the characteristics that define an effective school and effective learning. The findings and conclusions are presented in chapter 7. The final section of the report (Chapter 8) gives recommendations for a coherent improvement in the quality of pupil learning in primary schools in Singida region. The annexes are presented in chapter 9 while the bibliography is chapter 10

4. THE CONTEXT: PRIMARY EDUCATION

4.1 Objectives and education sector reforms

21. The main delivery system for the basic education of children, outside the family, is primary schooling. The major objective of pre-school and primary education is to lay the socio-cultural foundations which ethnically and morally characterize the Tanzanian citizen and nation. It prepares every citizen to continue on the unending journey of lifelong education, training and learning processes. Primary school education is fundamental to the strengthening of higher levels of education. (ETP, 1995).

22. Most of the education sector reforms began in 1995. The overall objective has been to ensure an equitable access to high quality formal education and adult literacy through facilities' expansion, efficiency gains and quality improvement, accompanied with efficient supply and use of resources. Following the development of the Education and Training Policy 1995, the Ministry developed the following plans/programs: Education Sector Development Programme (ED-SDP), Local Government reform Act of 1998, Primary Education Development Plan (PEDP) 2002-2006, Secondary Education Development Plan (SEDP) 2004-2009, and the Adult and Non-Formal Education Implementation Plan (ANEIP) 2003/04-2007/08. All these programmes have been developed to improve the quality of education and strengthen the link between education provided at all levels and the social and economic development of Tanzania.

23. The Government of Tanzania through the Ministry of Education and Culture (MoEC) and The President's Office, Regional Administration and Local Government (PO-RALG) since July 2001 has been implementing the Primary Education Development Plan (PEDP) 2002 – 2006 focusing on the following main aspects: Access, Quality, Capacity Building and Institutional Arrangements. The main aim of PEDP is to ensure that all children, particularly girls, children in difficult circumstances, and those belonging to ethnic minorities, have access to and complete free compulsory primary education of good quality. The implementation of PEDP within the context of the LGRP entails clarification and specification of roles and functions of the different actors in the delivery of primary education. In the decentralization arrangements, the Ministry of Education and Culture is responsible for policy making, standards setting and quality assurance. On the other hand, the overseeing mandate is vested in PO-RALG. At the lower level, the Local Government Authorities (LGAs) are held responsible for managing the implementation of PEDP. Specifically the LGAs are responsible for guiding, supervising, supporting and coordinating the implementation work by communities and school committees.

4.2 Progress towards improvement of primary education

24. The overall enrolment in the primary school system had risen significantly since the inception of PEDP as shown in Table 4.1. The net enrolment (NER) and the gross enrolment (GER) have been improving over the same period. This has been mainly attributed to the policy changes that have taken place in the course of implementing the PEDP (removal of school fees in primary schools and the introduction of capitation per pupil directly to schools.

33.

Table 4-1: Overall Primary School Enrolment (I-VII) for years 2002-2004

Year	School Age Population (7-13)	Enrolment of 7-13 (Std I-VII)	Total Enrolment (Std I-VII)	NER	GER
2002	6,054,257	4,884,385	5,972,077	80.7%	98.6%
2003	6,229,830	5,515,793	6,562,772	88.5%	105.3%
2004	6,665,347	6,034,526	7,083,063	90.5%	106.3%

Source: Basic Statistics in Education, 2004

25.   Construction of classrooms has been a PEPD priority activity. Table 4.2 shows the number of classrooms completed in 2002-2004. The completion rate was 63% for the year 2002, 80% for the year 2003 and 72.7% for the year 2004. The requirement was a total 41,467 classrooms and only 29,922 (72.2%) classrooms were constructed by 2004. The conclusion is that the targets for the past three years regarding construction of classrooms were not met as planned. There were still 12,545 classrooms to be constructed according to the 2002-2004 PEDP targets. Overcrowding in classrooms and dilapidated and temporary classroom structures pose a challenge to improving pupils learning outcomes.

Table 4-2: Construction of classrooms 2002-2004

Year	Annual target	Actual construction	% of classrooms completed
2002	13,868	8,817	63%
2003	13,396	10,771	80%
2004	14,203	10,334	72.7%
Total	41,467	29,922	72.2%

Source: National Monitoring report, PEDP, April 2004.

26.   The increases in the numbers of teachers has not keep pace with the increases in enrolments and so the pupil-teacher ratio climbed from 46/1 in 2001 to 53/1 in 2002 to 57/1 in 2003 and to 59/1 in 2004. The expected ratio is 40:1. There are variations of course, for example, in Kilimanjaro the ratio was 39:8 while in Mwanza it was 73.5, reflecting the uneven distribution of teachers as noted in the PEDP Review of 2004. However, the removal of academic up-grading courses in favor of professional up-grading courses has encouraged the enrolment of Grade B/C teachers into the professional up-grading courses. This may with time increase the number of trained teachers in the primary education sector.

27.   Improvement in the supply of textbooks from the previous Pupils to Book Ratio (PBR) of over 1:10 to 1:3 for Standard I-IV and 1:6 in Standard V-VII is the result of the introduction of Capitation Grant (CG) to schools. The introduction of Capitation Grant to schools at a level of US $ 10 per pupil has been a step towards addressing quality related activities at that level. Schools are allowed to manage their CG in specified areas including purchase of textbooks and other education materials they needed.

28.   On the issue of examinations, the Joint PEDP review (2003) observed that,

> in examinations at both Standard IV and Standard VII girls perform significantly worse than boys, contrary to the trend found in many other countries. Failure rates are unacceptably high. At Standard VII, 72.8% of all candidates (79.9% of girls) failed and of the minority who passed most did so in the lowest category, grade "C". Only 12.2% of candidates could be selected for entry to Form 1 of public secondary school (range from 18.8% in Kilimanjaro to only 6.9% in Shinyanga), plus 9.5% to private secondary school. There was an inverse relationship between examination results and pupil-teacher ratio - those regions with above average pupil-teacher ratios had below-average examination results, and those regions with below-average pupil-teacher ratios had above-average examination results. (MoEC, 2003)

The situation improved in 2004 with the national PSLE pass rate climbing from 27% in 2002 to 40% in 2003 and 48.7% in 2004 although girls continued to perform poorly.(Euan Davidson)

4.3   The status of education in the four districts of Singida

29.   The Singida Regional Vision in Education Sector development is based on the need to have literate people equipped with relevant knowledge to cope with local national and global challenges related to political, social and economic changes by the year 2025. The Mission is to deliver quality basic and further education by jointly involving all stakeholders and partners found inside and outside the region.

30.   Singida region has 452 primary schools out of which 447 are government owned. Gross enrolment in government schools is 255,208 pupils whereas 130,929 are boys and 124,279 are girls. There are currently 4,202 primary school teachers out of whom 1,673 are males and 2,529 are females. Hence the teacher pupil ratio is 1:66 as compared to national standard of 1:40. The region has a deficit of 2,118 teacher's equivalent to 33.5% of the required demand. To improve performance this bottle neck has to be removed as in Table 4.3.

Table 4-3: Teachers demand and deficit in Singida Region

COUNCIL	DEMAND	AVAILABLE	DEFICIT	% DEFICIT
Manyoni	966	706	260	37
Iramba	2,025	1,430	595	29
Singida (R)	2,503	1,407	1,096	43
Singida (M)	826	659	167	20
TOTAL	6,320	4,202	2,118	33.5

Source: Singida REO's Office.

31.   School children in primary schools don't complete their school cycles because of truancy, unwanted pregnancies, early marriages and deaths. Table 4.4 describes this situation for 3 cycles of schooling. The completion trend for the three cycles of primary education as illustrated has not changed, and the situation is critical since for every 100 pupils about 30 children drop out of the school system before completion.

Table 4-4: Completion rates for three school cycles

INITIAL YEAR	REGISTERED PUPILS (STD 1)	FINAL YEAR	PUPILS LEAVING STD VII	COMPLETION RATE (%)
1996	24,980	2002	17,820	71.3
1997	26,857	2003	19,190	71.4
1998	27,709	2004	21,238	76.6

Source: REO Singida

32.   On primary school leaving examination, Singida region was the last but one out of 21 mainland regions for year 2004. (MoEC, 2004). In the same year, the national pass rate was 48.7% as given by the ministry. The regional pass rate was 26.4% for the same examination. The pass rate for the sample schools in this study was 41%%. Both the sample of the thirty schools and the regional pass rates are below the national pass rate. The pass rate for the sample schools has been high because the sample included the best fifteen schools in the region

33.   As for the completion rate for year 2004, the national figure was 77%. That has also been the Singida regional figure. However, for the sample schools, the completion rate was 86.2%. The rationale for the figure being higher could be attributed to the fact that the best fifteen schools in that region had been sampled (picked). What goes on in the schools is what then affects the quality of school performance.

34.   With regard to transition rates to join secondary school, the national figure for the year 2004 was 36.1%, while the regional transition rate was 19.9%. The sample schools had a transition rate of 35.2%. Still, the regional and the schools' transition rates are below the national transition rate. What are the critical characteristics in the region that need to be addressed in order to reverse the poor performance exhibited in the region? The next four paragraphs refer to each district.

35.   Iramba district has 180 primary schools with 80,960 pupil enrolment for the year 2004 out of whom 41,149 are girls (50%). The district has the largest number of teachers compared to the four districts totaling 1,430 teachers (513F, 917M). The Grade B teachers are 687 (230F, 457M). The Grade A teachers are 733 (280F, 453M). The Diploma holders are 10 (3F, 7 M). PSLE examination results for 2001 to 2004 for the district indicate that the majority of pupils pass in grades D and E and girls are doing poorer in all the four years. In fact, Iramba district was the last but one out of the 118 districts in the country regarding the Primary School Level Examination Results for the year 2004 as shown in Table 4-5

Table 4-5: Summary of PSLE performance in Iramba District from 2001 to 2004

Year	Grade										Joined Government secondary schools		
	A		B		C		D		E				
	B	G	B	G	B	G	B	G	B	G	B	G	Total
2001	2	0	103	26	492	306	1112	1310	914	1290	459	202	661
2002	2	1	110	69	413	275	1354	1508	909	1204	315	313	628
2003	8	20	87	34	560	382	1492	1918	637	782	392	360	752
2004	2	0	204	296	808	522	2361	2556	1071	1315	482	460	942

Source: Ministry of Education and Culture.

36.   Singida Rural District is next to Iramba geographically The district has 147 primary schools owned by the Council or the Local Government as in the other district with 100,959 pupils (49% being girls). The district has the highest demand of teachers for the primary school in the region with a deficit of 1,096 teachers or 43%. There are 801 Grade A teachers out of which 296 are female teachers. The Grade B teachers number 572 (184 being female teachers). The district too has more diploma holders than in the other districts where there are 34 of them (3F, 31M). PSLE results, Like in Iramba, Singida Rural has not performed well at all as shown in Table 4.6 below. In the 2004 PSLE Results it occupied the 87/118 position in the country.

Table 4-6 Summary of PSLE performance in Singida Rural District from 2001 to 2004

Year	Grade												
	A		B		C		D		E		Total		
	B	G	B	G	B	G	B	G	B	G	B	G	Total
2001	1	0	150	24	611	309	1285	1553	833	1550	2880	3436	6316
2002	6	0	157	21	359	286	1983	1729	1517	1228	3281	3807	7088
2003	5	0	292	55	1077	672	1742	2402	490	754	3606	3883	7489
2004	6	2	552	145	1302	1001	1500	2100	287	431	3647	3679	7326

Source: Ministry of Education and Culture.

37.   Manyoni district has 58% of the total regional land. It is vast and the schools are scattered. The terrain is problematic for traveling between schools. The district has 91government primary schools and a population of 40696 pupils (48% being girls). Manyoni has 333 Grade B teachers (94F, 239M), 362 Grade A teachers (147F, 215M), and 11 Diploma holders (4F, 7M). This makes a total of 706 teachers (245F, 461M). Over the years, PSLE performance is quite poor with very few pupils passing in grade A and B. See details of in table 4.7 below. Its position was 82/118 for the 2004 PSLE results.

Table 4-7: Summary of PSLE performance in Manyoni District from 2001 to 2004

Year	Grade										Joined Government secondary schools		
	A		B		C		D		E				
	B	G	B	G	B	G	B	G	B	G	B	G	Total
2001	3	0	72	38	262	181	433	522	242	358	263	175	438
2002	8	0	155	60	228	158	585	682	330	521	238	185	423
2003	1	0	194	57	382	292	511	691	201	372	263	252	515
2004	9	0	88	28	269	172	566	660	388	517	422	411	833

Source: Ministry of Education and Culture.

38.   Singida Municipality houses the headquarters for the region with 26979 pupils (49.5% being girls) in 34 primary schools. The Municipality has a deficit of 167 teachers or 20% teachers' deficit, the lowest in the four districts. There are more female teachers than male ones. The Municipality has 174 Grade B teachers (122F, 52M), 471 Grade A teachers (305F, 166M) and 14 Diploma holders (6F, 9M).

The total number is 659 with 432 females and 227 males. It occupied the 76/118 position in the 2004 PSLE Results. Despite that it enjoys the urban advantage; the schools in Singida Municipality do not perform well as shown in the Table 4-8.

Table 4-8: Summary of PSLE performance in Singida Municipality from 2000 to 2004

Year	Grade										Joined Government secondary schools		
	A		B		C		D		E				
	B	G	B	G	B	G	B	G	B	G	B	G	Total
2001	5	2	79	53	303	249	345	608	164	225	101	151	252
2002	3	3	99	33	243	184	539	625	156	217	142	135	277
2003	0	o	81	55	345	282	554	703	102	140	180	176	356
2004	0	0	153	53	456	359	383	602	61	198	179	176	355

Source: Ministry of Education and Culture.

39.   In conclusion, the policy environment for the implementation of education reforms is favorable and progress has been made as far as accessing primary education to all children of primary going age is concerned. However, nationally and for the four districts where the study was undertaken, the above statistics on PSLE results indicate that the majority of pupils do not pass their exams and quite a small percentage continue to secondary schools. This is detrimental to the country's development objectives. Failure to achieve the required learning levels by pupils was the major focus of this study. Why do some schools perform better while others do not? What are the critical characteristics that need to be addressed in the situation? The study has explored this question.

5. DESIGN OF THE STUDY

5.1 Purpose and Scope of the Study

40.   The main purpose of the study was to identify specific school level characteristics in the four districts of Singida region, which can be used as catalysts for improving pupils learning outcomes in and outside the region. The identified characteristics would be used as important benchmarks for flexible implementation of contextualised interventions in the region but also to create a cadre of local educators who will continue to analyze the quality of their schools working with other local educators. The study was conducted in 30 selected government schools in the four districts of Singida region. The choice of the region was prompted by the enormous challenges the region faces in addressing issues of enrolment, retention and completion rates of pupils as well as the poor performance in the final national examinations, PSLE.

5.2 The Research Team

41.   The Research Team consisted of nineteen local educators who were mainly drawn from Singida region. The breakdown is ten Head teachers, (2F, 6M), four Teachers' Resource Centre Coordinators (1F, 3M), two tutors from the Teachers' College (1F, 1M), one inspector of schools (M) and two Curriculum Developers from the Tanzania Institute of Education (1F, 1M). The Team was facilitated by two experienced researchers, the national consultant, and his counterpart who had been the national consultant for the Uganda study. During the data analysis workshop, the Team was joined by another experienced researcher and the overall coordinator of the research in the three countries – Tanzania, Mozambique and Madagascar. The team members had an average of 15 years of experience as shown in Annex 1. Part of the team is seen in Figure 4-1.The study took five months starting in September 2005.

Source: Singida, Tanzania.

Figure 4--1: Members of the research team doing the first exercise in the design workshop

5.3   Selection of schools

42.   The PSLE results grades of A, B, C, D and E[1] were taken for three consecutive years (2001, 2002 and 2003). The list in each district was divided into two halves, the first half being those schools performing well and the other half are those not doing well. A school was selected in the list if it was found to appear in the same group in all the three years consecutively. The sampling of the number of schools per district was based on the fraction of the total number of schools in each district to the total number of schools in the region as shown in table 5.1 below. Another consideration during sample selection was geographical location so that both near and far off hard to reach schools are included. In the end, a list of 30 schools was obtained.

Table 5.1: The district distribution of schools

District	Number of schools	Number of schools selected
Singida (Urban)	39	4
Singida (Rural)	147	10
Iramba	148	10
Manyoni	88	6
Total	422	30

Source: Singida Region

5.4   The Research Process

43.   The research design was developed in a two-week workshop where the consultants worked with the research team to identify general factors, characteristics and indicators that influence pupils' performance in Singida. A draft of 'hypothesized framework of factors, characteristics and their indicators' was developed. Data specification forms were first produced for only 3 characteristics and pilot tested in six schools in the Singida Municipality. This served as a demonstration for the team to later finalize the Framework and the Data specification forms. During the workshop, all the District Education Officers and their Academic Officers under the leadership of the Regional Education Officer were debriefed on the research process. This was meant to solicit their in put in the Framework but also their support from during field work. By the end of the workshop, a third draft of the Framework of factors with their definitions, characteristics and indicators relevant to primary schools in the four districts (Annex 2); Data specification forms based on the framework of factors, District and School level collection data forms were also designed.

44.   During the same workshop, the research team concretized data collection plans as well. For purposes of objectivity it was agreed that researchers should not collect data from the districts where they work. Thus, in constituting field teams, a method was used to allocate teams to the different districts. Gender composition of teams was also taken into account. Attention was also drawn to even distribution of head teachers and Teachers Resource Centres among the teams. Other tasks included formation of smaller research teams, agreeing on mechanisms of cleaning the raw data collected from each school, and sorting out and preparing field research materials by each district team.

45.   Field work (data collection) was undertaken immediately after the study design workshop and data was collected in 30 schools in the four districts of the region. Researchers spent at most two days in each school after which each team spent a day organizing and editing the data on the school. The Data Specification Form (Field Guide, Annex 2) guided the researchers' note-taking during the interviews and observations at each school. District and School level data collection forms were administered to collect

quantitative data at the school and district levels. In addition, PEDP and other documents were reviewed in view of the education plans to reform schools in the country. At school level, school documents were reviewed and observation of teachers and pupils in classroom activities were carried out as summarized in Annex 9. Difficulties in reaching some of the schools, in all the districts were experienced. Lack of up-to-date and well-kept records and not all teachers being in the schools were yet other problems faced by most of the research teams. The fieldwork was monitored by the national consultant.

46.   Data analysis workshop lasted from November 7 – 18, 2005. During the analysis and discussion of the field data, the information obtained from the schools on each characteristic included in the study was summarized and discussed, and then each school was categorized "high" or "low" on the characteristic based on the indicators for that characteristic. Once all thirty schools had been categorized on all the characteristics studied the overall strength of the associations of each school characteristic with PLE results and with other school characteristics was estimated. Methodologically, associations, or correlations, between characteristics and between them and a school's PSLE results were checked by looking at the high/low rating given to a school on each characteristic. The Team discussed the qualitative data from the school visits in light of the Research Team members' intimate knowledge of the region's schools, and it calculated correlations using Yule's Q, a simple formula for testing correlations of binary variables (in two-by-two tables). Also the Pearson Chi-square calculations were used by the Team in its discussions of the association between school characteristics and PSLE results.

47.   In the month of December 2005, the consultants used the notes from the Research Team's discussions and analysis of findings to compile a draft report. The full Research Team then extensively discussed the draft report and finalized it in a 5-day workshop in January, 2005. The draft was then reviewed at a workshop at which the findings of the study were shared with other education stakeholders to allow them to make their contribution to the report. The workshop was also used as an opportunity for the districts to discuss how to use the results of the study to improve their district education plans and activities.

6. THE FRAMEWORK OF CHARACTERISTICS

6.1 Pupils' outcome indicators

48.   The research team knew their schools well. Through thorough discussion, the researchers identified pupil outcome indicators and school characteristics upon which these outcomes depended upon. Primary School Leaving Examination (PSLE), completion rates results and the transition rates were the most available and potentially indicative measure of pupil learning although in Tanzania the research team was aware, it is plausible that PSLE results are not a good measure of the sort of learning that leads to problem solving, creativity and resourcefulness among pupils.

6.2 The general factors

49.   A conceptual framework of factors that determine school effectiveness developed by Heneveld (1994) was used as a guide to prepare definitions for a profile of effective primary schools in Singida region in Tanzania. Three levels of generality inform this framework:
- The general factors that influence a school's performance;
- The school characteristics related to each factor that "characterize" schools in the region that will be studied;
- Indicators for each characteristic that would allow one to observe at what level a school is performing with respect to an indicator and later to compare one school's data with what others observed in other schools.

50.   The Research Team identified five general factors that were hypothesized to influence pupils' outcomes in the primary schools in Singida. These are:
- An effective and competent teacher
- Effective School Administration
- Effective Financial and Material Support
- Professional Support and School Supervision
- Community involvement

6.3 The characteristics

51.   Each factor was then defined by specific behavioral characteristics that would be found in a school if the school was doing well on this factor and each characteristic was defined by specific indicators. For example, the first factor, "An effective and competent teacher" was characterized as follows: 'the teacher has mastery of the content and methodology he/she is teaching', 'carries out timely assessment and evaluation of pupils' learning', 'motivates pupils for effective learning', 'he or she is a role model', enables pupils to applying knowledge and skills', and 'puts into consideration gender and individual needs and differences while teaching'.

6.4   The indicators

52.   Likewise for each characteristic, indicators were identified. The indicators are the detailed observable and measurable items for data collection in the field. In other words each characteristic was defined by what the team thought would find in the region's schools that indicated the level of that characteristic in a school. For example, for the first characteristic above, "the teacher has mastery of the content and methodology he/she is teaching," may be expected to exist in a school to the extent to which the school has evidence of the following indicators:

- Ability to interpret the curriculum
- At least he/she has completed Grade III A
- Ability to deliver content/materials accurately
- Uses participatory method e.g. discussion.
- Uses instructional materials effectively

The complete hypothesized framework of factors, characteristics and indicators prepared by the Research team is presented in Annex 2.

6.5   The detailed description of the characteristic and indicators used in the study

53.   The Framework had 18 prioritized characteristics by the end of research design stage. However, during the data analysis workshop, one more characteristic "School infrastructure" that had been integrated into "capacity to utilize funds and other materials effectively'' was pulled out to stand as an independent characteristic. School visits revealed that school infrastructure was significant in influencing pupils' outcomes and therefore needed to be analyzed independently. The summary of the school infrastructure for the thirty schools is presented in Annex 7. Altogether, data was collected and analyzed on 19 school characteristics.

54.   Expanding further the characteristics for each factor, we continue with the first factor slightly elaborated above. Effective and competent teacher includes the characteristic, "Carries out timely and effective assessments and evaluation of learning," This meant that the teacher prepares and gives appropriate class exercises, homework and tests and also marks pupils' work and gives feedback to pupils on time. In addition the effective and competent teacher motivates pupils for effective learning and that he/she should be a role model by managing the class well, being regular and punctual at school, and being clean and well dressed. Furthermore he/she should enable pupils to apply knowledge and skills. A competent teacher delivers the subject matter accurately as well. Finally, the teacher distributes class activities to boys and girls, uses girl and boy friendly language and the teacher has initiatives to address gender and individual needs/differences and considers gender and individual needs and differences has been taken into account in the learning process for pupils

55.   As for the effective school administration, the study focused on regular and effective horizontal and vertical communication in the school administration. The Head teacher is regarded as a role model and motivates all staff and the pupils. Regular monthly meetings are to be held to ensure smooth implementation of the resolutions that are important to the quality of education in the school. There is display of information and the rules and regulations that run the school. Also the Head teacher monitors and supervises the school activities like checking and endorsing the schemes of work and the lesson plans for his/her teaching staff. Considering the characteristic of, "The Head teacher is a role model," has the following indicators:

- Display of important information and having a proper filing system
- Analyses school level information for decision making

- ♦ Displays schools rules and regulations
- ♦ Punctual and regular at school
- ♦ Consistence in his/her duty
- ♦ Engages in Classroom teaching
- ♦ Clean and well dressed

56. For the factor of Effective Financial and Material Support the research team looked to see if the funds from the Central and Local government are timely released to schools and if there is financial and material support from other stakeholders. There is also effective support by the administration if school administration is capable of utilizing fund effectively and there is adequate and enough school infrastructure. The indicators used were the availability of a functional school finance committee, availability of well kept files of school financial documents, adequate material for teaching and learning and types and sources of support for each school. More details are found in Annex 2a and 2b.

57. As for the factor of Professional Support and School Supervision, there were two characteristics which are regular and effective external supervision and effective professional support. The first characteristic studied how supervisors make regular and focused visits to school and the extent to which external supervisors discussed and gave feedback and advice on school's whole plan. Indeed there should be a mutual relationship between teachers, supervisors and the Head teacher and the implementation of supervisor's recommendations. The second characteristic was exploring whether the District Education Officers, Teacher Colleges and Teacher Resource Center Coordinators organize in-service training and seminars for the schools, they coordinate and regularly follow up in schools and they organize and implement teachers' up-grading programmes.

58. The final factor was the community involvement which had three characteristics. The first one, "The child is provided with basic needs by parents" had the following indicators: Pupils have full school uniform, are clean and well dressed and have scholastic materials and there are feeding programmes and other community initiatives for orphans and the needy. The second one was that "Parents send children to attend school and visit the school regularly." This had the following indicators.
- ♦ Regular attendance of pupils at school
- ♦ Pupils' punctuality at school
- ♦ Implementation of resolutions by parents to ensure children's regular attendance
- ♦ Time table for parents to visit school
- ♦ Parents' records on pupils' discipline
- ♦ Parents' meetings resolutions
- ♦ Parents' day and parents' meeting

59. The third and last characteristic on community involvement dealt with, "Parents and community provide financial and material support." The first indicator focused on parents' financial and material contribution which was meant to enable the pupils to have the necessary scholastic materials for learning. The second indicator was on the Community financial and material contributions which are basic for the well being of the school in performing well in the PSLE Results. The next section has the findings, conclusions and recommendations with respect to the school characteristics.

7 THE FINDINGS AND CONCLUSIONS

7.1 Introduction

60. This chapter presents the Research Team's findings on the sample of thirty schools and conclusions have been made on which characteristics are most critical in influencing pupils' outcomes. During data analysis, the schools were categorized as "high" or "low" on the PSLE results and on each characteristic for which data were collected. As a result of the analysis the Research Team identified eight (8) key characteristics out of the nineteen characteristics studied that influence pupils' results. These include:

- The Head teacher is a role model
- Monitoring and supervising school activities by the Head teacher and administrative staff.
- The teacher motivates pupils for effective learning
- The teacher has mastery of content and methodology he/she is teaching
- The teacher carries out timely assessment and evaluation of pupils' learning
- Adequate school infrastructure
- Effective horizontal and vertical communication by the school administration, and
- School administration's ability to utilize school funds effectively.

61. The results of the High/Low rankings for all the characteristics are presented in Table 7-1. The thick line in the middle separates the top fifteen good performing schools as compared to the lower fifteen schools not doing so well in the PSLE Results. This is reflected in the first column in the table. The first row has the characteristics by numbering them from 1 to 19 and the second row has the abbreviations with their key at the bottom of the table. The last row in the table gives the total number of "HIGH (HI) s" for each characteristic.

62. Relationships of the characteristics to PSLE results and with each other was analyzed by examining the data from each school, running tests of association between variables, and by discussing the implications of all the information that was collected and analyzed. The Research Team's general hypothesis was that, schools with high PSLE results would rate higher on the selected characteristics than schools with poor results. When it was found that one characteristic was correlated with another across all 30 schools, the possibility of these two school characteristics working together to influence learning outcomes was explored. In general, the analysis demonstrated that some of the indicators were absent in nearly all the schools (e.g. teachers using teaching methods that encourage problem solving and creativity, constructive use of text books and other learning materials, school committee checking on performance of school activities, availability of a school feeding program). Other indicators did not show enough variation to be used to differentiate among schools (e.g. teacher marking pupils work and giving feed back on time, use of learner friendly language, Head teacher engaging in classroom teaching, Head teacher clean and well dressed, capitation grant received on time). This limited the indicators that could be used to rate a school high or low on a characteristic.

63. From the data collected and analyzed the research team found that 13 out of the 19 characteristics on which data was collected and analyzed were not as directly associated to PSLE results in Singida region as the Team had hypothesized. These characteristics include;

- An affective and competent teacher is a role model
- He/she enables pupils to apply knowledge and skills

- He consider gender and individual needs while teaching
- There is regular and effective and regular horizontal and vertical communication
- Head teacher motivates teaching/support staff as well as pupils
- Funds from Central and Local Government timely released
- There is financial and material support from other stakeholders
- School administration is capable of utilizing funds effectively
- Regular and effective external supervision
- Effective professional support by the educational system
- Child is provided with basic needs by the parents
- Parents send children to school and visit the school regularly
- Parents and community provide financial and material support

64.   Characteristics to characteristic analysis of the above revealed two characteristics that have more than five characteristics they interact with to influence PSLE results. These two and the characteristics they interact with are:

(1) 'There is regular and effective horizontal and vertical communication by the school administration'. This was found to have strong associations with:
- Teacher has mastery of content and methodology (Pearson chi-square.034)
- Teacher carries out timely assessment and evaluation of pupils' learning (Pearson chi-square.050)
- Teacher is a role model (Pearson chi-square.020)
- Teacher enables pupils to apply knowledge and skills (Pearson chi-square .037)
- Teacher considers gender and individual needs while teaching (Pearson chi-square .014)

(2) 'School administration capability to utilize funds affectively' and it had associations with:
- Teacher has mastery of content and methodology (Pearson chi-square .034)
- Teacher carries out timely assessment and evaluation of pupils' learning (Pearson chi-square .050)
- Head teacher is a role model (Pearson chi-square .001)
- Regular and effective and horizontal and vertical communication (Pearson chi-square .012)
- Monitoring and supervision of school activities by head teacher and school Administration (Pearson chi-square .001)
- Regular and effective horizontal and vertical communication by the school administration.(Yule's Q .50)

Given their strong associations with several other characteristics, the Research Team added the two characteristics above to the list of key characteristics as 'enabling characteristics' that when present in schools enhance the head teacher and teacher's effectiveness for better pupils' outcomes.

65.   Six out of the above list of 13 characteristics are probably important but this study does not provide evidence to show that they influence PSLE results in Singida primary schools. The characteristics include:
- There is financial and material support from other stakeholders
- Regular and effective external supervision
- Effective professional support
- Child is provided with basic needs by the parents
- Parents send children to attend school and visit the school regularly (Refer to annex 8)
- Parents and community provide financial and material support (refer to annex 5)

Refer to the high/low rating of each school on each of the above characteristic as presented in Table 7-1 and annexes 4a, 4b and 4c for relational associations. The above characteristics did not show enough

variation and/or relationship with PSLE and other characteristics to be included as priority characteristics. A disappointing finding is that external supervision by the DEOs and school inspectors; and professional support by the teachers' college and Teacher Resource Centre Coordinators as currently carried out in Singida schools does not have a significant relationship with PSLE results but also with other characteristics. School visit by the researchers and drawing from their own experience showed that school inspection and professional support was too sporadic and unfocused to make a difference in schools. The researchers also felt that the current ambiguities in the relationships and communication channels among different education stakeholders at the national, regional, district, division, ward and school level made it difficult for external supervision and professional support to be effective. Further study may be required to explore such relationships and how they impact ultimately to the quality of learning in the schools.

66.　　The most revealing finding is that schools are more effective when: the teacher (1) motivates pupils for effective learning, (2) has mastery of the content and methodology he/she is teaching and (3) carries out timely assessment and evaluation of pupils' learning; and (4) when the Head teacher is a role model who (5) monitors and supervises the teaching and learning processes. Their effectiveness is further enhanced if (6) the school has adequate infrastructure. The details of the correlations of the characteristics to the PSLE Results using the Yules'Q and the Pearson chi-square are presented in Annex 4a and 4b. Further analysis of the characteristic-to-characteristic drawing from the researchers' experience and using the Pearson chi-square coefficients (Annex 4c) revealed two more characteristics that do not relate strongly to pupils' PSLE results. The two characteristics are (1) effective horizontal and vertical communication by the school administration and (2) School administration's ability to utilize school funds effectively. These two characteristics, like adequate infrastructure are 'enabling characteristics' that reinforce the effectiveness of both the teacher and the head teacher. The eight critical characteristics and the way the research results suggest relate to each other are summarized in Figure 7.1.

67.　　Additionally, the findings of this study suggest that primary schools in Singida region tend to have better results when: the Head teacher is a role model and he/she monitors and supervises the teaching and learning processes. These influences the teacher's mastery of content and methodology and timely assessment and evaluation of learning; leading to motivation of pupils for effective learning. The other priority characteristics i.e. 'adequate school infrastructure', 'school administration's horizontal and vertical communication' and its ability to utilize funds are enabling characteristics that combine to reinforce achievement of better school results. The rest of the chapter discusses the findings and the conclusions about each of these critical characteristics but starts with the pupil's outcomes.

Table 7- 1: Local Study of the Quality of Primary Education in Singida: Schools and all the Characteristics ranked

HI

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
SCH	SR	MC	TAE	MP	RM	KS	GIN	HVC	MS	HRM	MSP	FCL	FMS	AUF	ES	PS	BN	PC	PCS	INF
1	HI	HI	HI	LO	HI	HI	LO	HI	HI	HI	LO	HI	LO	HI	LO	LO	LO	LO	LO	LO
3	HI	LO	HI	LO	HI	LO	LO	LO	LO	LO	LO	LO	LO	LO	LO	LO	LO	LO	HI	LO
5	HI	HI	HI	LO	HI	LO	LO	LO	LO	HI	LO	HI	HI	HI	LO	LO	LO	LO	LO	LO
7	HI	LO	LO	HI	LO	LO	LO	LO	LO	HI	LO	LO	LO	LO	LO	HI	LO	LO	LO	HI
10	HI	HI	HI	HI	HI	LO	LO	HI	LO	LO	LO	HI	HI	LO	HI	LO	LO	LO	LO	LO
12	HI	HI	HI	HI	HI	LO	LO	HI	LO	LO	HI	HI	LO	LO	LO	HI	LO	HI	LO	HI
14	HI	HI	HI	LO	HI	LO	LO	HI	HI	HI	HI	LO	LO	HI	LO	HI	LO	HI	HI	LO
16	HI	HI	HI	LO	HI	HI	HI	HI	HI	HI	LO	LO	LO	LO	LO	HI	LO	HI	LO	HI
18	HI	HI	HI	LO	HI	LO	LO	HI	HI	HI	LO	HI	HI	HI	LO	LO	HI	LO	LO	LO
19	HI	HI	LO	LO	HI	LO	LO	HI	HI	HI	HI	LO	HI	HI	LO	HI	LO	HI	HI	HI
21	HI	LO	LO	LO	HI	LO	LO	LO	LO	HI	LO	HI	HI	LO	LO	LO	LO	LO	HI	LO
23	HI	HI	HI	HI	LO	LO	LO	LO	LO	LO	LO	HI	HI	HI	LO	LO	LO	LO	LO	HI
25	HI	HI	HI	LO	HI	LO	LO	HI	HI	HI	LO	HI	HI	HI	HI	HI	LO	HI	LO	HI
27	HI	HI	HI	LO	HI	LO	LO	LO	HI	HI	LO	HI	HI	HI	HI	HI	LO	LO	HI	HI
30	HI	HI	LO	LO	LO	LO	LO	LO	LO	LO	LO	LO	HI	LO	LO	LO	LO	LO	LO	HI
2	LO	LO	LO	LO	HI	LO	LO	LO	LO	LO	LO	HI	HI	LO	HI	LO	LO	LO	LO	LO
4	LO	LO	LO	LO	HI	LO	LO	LO	LO	LO	LO	HI	LO	LO	LO	LO	LO	LO	LO	LO
6	LO	LO	LO	LO	LO	LO	LO	LO	LO	LO	LO	LO	LO	LO	LO	LO	LO	LO	LO	LO
8	LO	LO	HI	LO	LO	LO	LO	LO	LO	LO	LO	HI	LO	LO	LO	LO	HI	HI	HI	LO
9	LO	LO	HI	LO	LO	LO	LO	LO	LO	LO	LO	LO	HI	LO	LO	LO	LO	LO	LO	LO
11	LO	HI	LO	LO	LO	LO	LO	LO	LO	LO	LO	LO	LO	LO	LO	HI	LO	HI	LO	LO
13	LO	HI	HI	LO	HI	LO	HI	HI	LO	HI	LO	LO	HI	LO	LO	HI	LO	LO	LO	LO
15	LO	LO	LO	LO	HI	LO	LO	LO	LO	LO	HI	LO	LO	LO	LO	HI	LO	HI	LO	LO
17	LO	HI	HI	LO	HI	LO	HI	HI	LO	HI	LO	HI	HI	HI	HI	LO	LO	HI	LO	HI
20	LO	LO	LO	LO	HI	HI	LO	HI	HI	LO	LO	HI	LO	HI	LO	LO	HI	LO	LO	LO
22	LO	HI	HI	LO	HI	LO	LO	LO	LO	HI	LO	LO	LO	HI	HI	LO	LO	LO	HI	LO
24	LO	HI	LO	LO	LO	LO	LO	LO	LO	LO	LO	HI	LO	LO	LO	HI	LO	LO	LO	LO
26	LO	LO	LO	LO	LO	LO	LO	HI	HI	LO	LO	HI	LO	HI	LO	LO	LO	LO	LO	HI
28	LO	HI	LO	LO	HI	LO	LO	LO	LO	LO	LO	LO	HI	LO	LO	LO	LO	LO	HI	HI
29	LO	HI	HI	LO	HI	LO	HI	HI	LO	HI	LO	HI	LO	HI	LO	LO	LO	LO	LO	LO
		HI= 19	HI= 17	HI=4	HI= 21	HI= 3	HI= 4	HI= 13	Hi= 9	Hi= 14	Hi=4	Hi= 17	HI= 14	HI= 13	HI= 6	HI= 11	HI=3	HI= 9	HI= 8	HI= 11

LO

Key to the variables is on the next page.

Key to variables for Table 7-1 from the previous page

Factor 1: An effective and competent teacher	Mastery of the content and methodology (MC)	Timely assessments and evaluation (TAE)	Motivates pupils (MP)	Role model (RM)	Knowledge and skills (KS)	Gender and individual needs (GIN)
Factor 2: Effective School Administration	Horizontal and vertical communication (HVC)	Monitoring, and supervision (MS)	Head teacher role model (HRM)	Motivating teaching staff/pupils (MSP)		
Factor 3: Effective Financial and Material Support	Central and Local government funds (FCL)	Financial and material stakeholders (FMS)	Utilizing fund effectively (AUF)	School infrastructure (INF)		
Factor 4: Professional Support and School Supervision	External supervision (ES)	Professional Support (PS)				
Factor 5: Community involvement	Basic needs (BN)	Parents send children to school (PC)	Parents/community support (PCS)			
	School (SCH)	School results (SR)	High Results (HI)	Low Results (LO)		

Figure 7-1: Relationships of the prioritized characteristics that influence pupils' learning outcomes
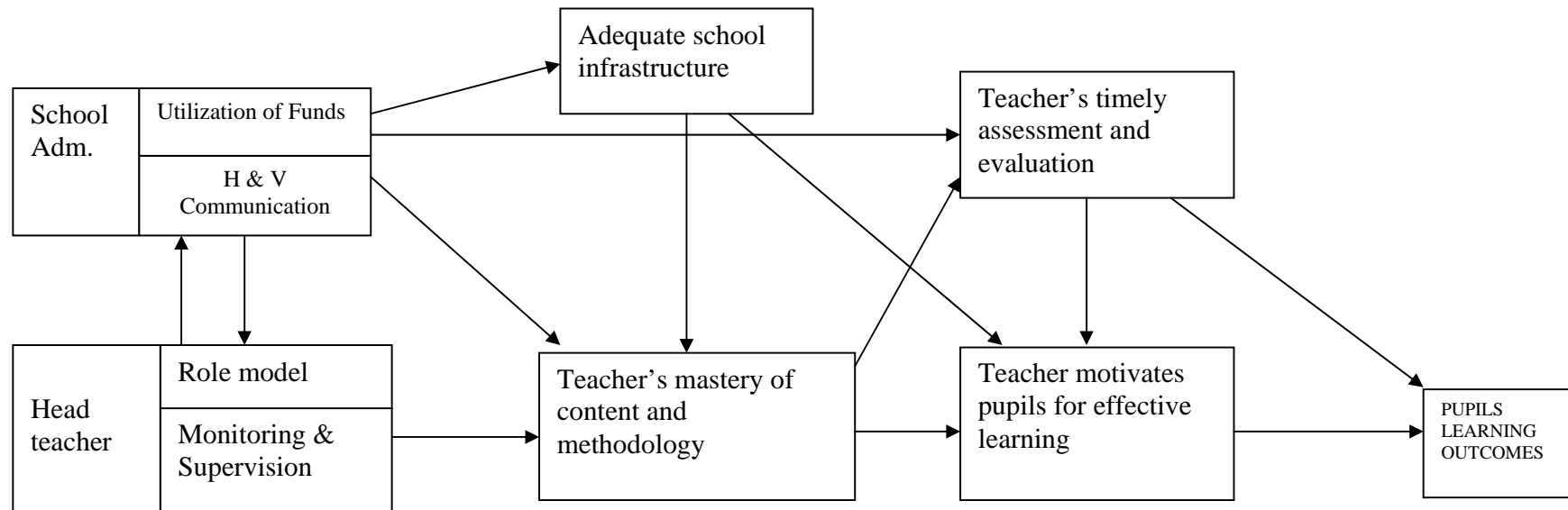
7.2   Pupils Outcomes

68.   Analyzed data on primary school learning outcomes in Tanzania in general and Singida region in particular suggest that a significant number of pupils are not achieving adequate levels of learning. In 2001, 2002, 2003 and 2004 PSLE performance in Singida region was ranked as follows, 16 out of 20 (2001), 20 out of 20 (2002), 20 out of 21 (2003) and 20 out of 21 (2004) of the mainland regions During those years, the national PSLE[2] pass rate were 28.6% (2001), 27.1% (2002), 40.1% (2003) and 48.7% (2004) while those of Singida were 26.67% (2003) and 26.7% (2004) as shown in Best (2003, 2004) The pass rate for the four district are as follows. Iramba had the pass rates of 16% (2001), 15% (2002), 18.4% (2003) and 20% (2004). Singida Rural had 17.3% (2001), 11.7% (2003), 28% (2003) and 41% (2004). Manyoni pass rate was 26.3% (2001), 22.3% (2002), 34% (2003) and 20.9% (2004). Singida Municipality pass rate were 34% (2001), 26.9% (2002), 33.7% (2003) and 45.1 % (2004). The sample of the thirty schools had the following pass rates of 21.6% (2001), 24.5% (2002), 36.2% (2003) and 41% (2004).   The districts and the regional PSLE pass rates are below the national pass rate in all the four years. What this actually means is that the majority of pupils, despite the weaknesses of the quality of the examination, failed to score 43% or more. (Euan Davidson 2004). As for the completion rate, the national figure was 77% for the year 2004. The figure for the region was also 77% from the regional data of Singida. What goes in the classroom is what then affects the quality of school performance. With regard to transition rates (primary to secondary school progression), the national figure for the year 2004 was 36.1%. The regional transition rate was 19.9% for the same year. The sample schools had a transition rate of 35.2%. Still the regional and the schools' transition rates are below the national transition rate. These findings indicate that schools have not been effective in influencing pupils' learning outcomes.

7.3   Teacher as a role model

69.   The research team hypothesized that if the Head teacher is a role model to the teachers and pupils in the school by being consistent in her/his duties then pupils results will be high. School visits revealed that the majority of teachers (18 out of 30) did not have a proper filing system and did not display important information in their offices and other places. Research team observations revealed that important school information on for example, enrolment, attendance, performance and correspondence from stakeholders were lumped in files without any order. As a result, it was found that 50% of the head teachers did not analyze school-level information to use it for planning and decision making purposes. Unfortunately, to many of the head teachers who had a proper filing system, this was a routine and mandatory duty like any of the other school activities. They did not seem to see the relationship between keeping the information and periodically analyzing it for planning and decision making for the effective management of teaching and learning. Important to note is that 9 out of the 15 schools that analyzed school-level information and used it for planning and decision making were the schools with high school results.

70.   Majority of head teachers were punctual and regular at school except in schools 6 and 4. On the average, time for arrival at school was 7.00am. However, it is important to note that 6 out of 30 head teachers were not found in their schools at the time the researchers visited the schools. While all Head teachers engaged in classroom teaching over a third (12 out of 29) did not have schemes of work, lesson plans and lesson notes and 8 out of these were Head teachers of schools whose PSLE results were not so good. In conclusion, this characteristic was found to have a significant relationship with the PSLE results (Yule's 0.60, Pearson chi-square 0.068). It also has significant relationships with the following characteristics: effective horizontal and vertical communication by school administration (Pearson chi-square 0.010), Head teacher monitors and supervises school activities (Pearson chi-square 0.005), a

teacher is a role model (Pearson chi-square 0.046), and the teacher considers gender and individual differences while teaching (Pearson chi-square 0.032). Then the Research Team concluded that when the Head teacher is a role model who keeps a proper filling system, analyses school level data for planning and decision making, consistent with his\her duties and engages in classroom teaching and prepares scheme of work and lesson plans, PSLE results will be high.

7.4 Effective Monitoring and Supervision of School Activities by Head teacher and other school administrators

71.   Effective monitoring and supervision of school activities was predicated on the research team's observation that in schools where the Head teacher and other school administrators provide constructive feedback to teachers with regards to preparations for teaching and the actual teaching process, follow up on pupil's performance, appraise teachers regularly and the school committee regularly checks on the performance of school activities, PSLE results are usually high. Analysis of the data collected revealed that while 26 out of 30 head teachers endorsed teachers' schemes of work and lesson plans, further scrutiny of the signed documents revealed that 14 out of the 26 Head teachers signed without paying particular attention to the content and accuracy of the schemes of work and lesson plans. In fact the signed schemes of work and lesson plans had been prepared in line with text books and not the school syllabus yet the head teachers approved them without pointing out such irregularities. Worse still, school visits established that in 4 schools i.e. 6, 8, 24 and 29 head teachers did not sign at all the observed teachers' schemes of work and lesson plans. In more than a half of the observed schools teachers had subject log books but unfortunately, had not been approved by the head teachers.

72.   With regard to Head teachers following up pupils' performance, the research team found evidence of Head teachers checking and signing pupils' exercise books in only 12 out of 30 schools. 16 out of 30 Head teachers did not check and sign pupils' assessment records and attendance book. Generally, a head teacher's daily programme was found in only 8 out of the 30 sample schools. In connection with whether the Head teacher had a mechanism in place for teachers' appraisal, the researchers discovered that the majority of schools did not appraise teachers regularly. Teachers appraisal letters were seen in only 4 out of 30 schools visited. There was not any mechanism in place for school committee to check on the performance of schools activities. As such, 28/30 of the schools did not have school committee time tables for inspecting activities except schools 1 and 25. In the final analysis, effective monitoring and supervision by the head and other school administrators was found to have a strong relationship with PSLE results (Pearson chi-square of 0.046). It was also found to have a significant relationship with other characteristics, namely "teacher enables pupils to apply knowledge and skills (Pearson chi-square 0.005) and effective horizontal and vertical communication (Pearson chi-square 0.001). The Research Team concluded that monitoring and supervision of activities by Head teacher and the school committee is effective to contribute to good PSLE results when the Head teacher endorses with constructive feedback to teachers' and pupils' teaching and performance documents respectively. In order to have impact on pupils' learning and performance, the research team concluded that the head should regularly monitor at least 4 out of 6 class level documents (schemes of work, lesson plans, subject log books, schools log books, pupils' assessment records, pupils' attendance book, and exercise books) and takes disciplinary measures where required. In addition, the impact will be greater when schools put in place mechanisms to appraise teachers regularly and the School Committee members visit the school regularly to discuss pupils' academic performance.

7.5   The Teacher has Mastery of Content and Methodology

73.   Regarding ability to interpret the curriculum, only 51 out of 148 teachers interviewed/observed were making use of the syllabus while preparing for teaching. In fact quite a good number of schools (14 out of 30 schools) did not have copies of the syllabus. What the research team observed in schools was the tendency among teachers to follow textbooks during teaching preparation and while teaching. The majority of teachers in the sample schools were Grade IIIA teachers, with 7 schools having less than or equal to 50% Grade IIIA teachers (See details in Annex 9). The research team further established that all the Grade B/C teachers in the schools were upgrading to Grade IIIA. Regarding the ability to deliver subject matter accurately, all teachers observed in 8 out of 30 schools were doing so while in other 6 schools only one of the teachers observed was delivering the subject matter accurately. In the other 16 schools, teachers were not delivering the subject matter accurately. With the use of instructional materials effectively, 12/30 observed schools had an average of book pupil ratio of 1:4, 17 out of 30 schools had the ranges of 1:6 to 1:18. Only school 15 had the ratio of 1:18. In all the 30 schools, textbooks were not actually in the hands of pupils. Each teacher brought in the text books for a respective subject and took them away after the lesson. In schools (11, 19, 21, and 29) teachers did not bring in any text books in class. Where loan books existed (15 schools) they were actually signed by teachers only most of the time, meaning that it is only teachers who borrowed the text books. In all 30 observed schools, only three showed the display of teaching aids/instructional materials in class. On this characteristic, all 30/30 observed schools; teachers did not have the initiative for the improvisation of teaching and learning materials. The majority depended on using textbooks only. They did not guide pupils to get information on topics under discussion from various sources. Participatory learner centred methods were seen used by all the teachers observed in 8 out of 30 schools. Yet in schools 5, 8, 9, 10, 11, 24, 29 and 30 only one teacher among those observed used participatory learner centred methods. In 24 out of 30 schools, pupils were not given an opportunity to ask questions but were responding to close ended questions asked by the teacher.

74.   Analytically, if mastery of content and methodology are high, PSLE Results should also be high. Indeed the research team found that there was a significant relationship between this characteristic and the PSLE Results (Yule's Q: 0.64; Pearson chi-square .058). There was also a significant relationship with other characteristics which were teachers' timely assessment and evaluation of pupils' learning (Pearson chi-square .013), horizontal and vertical communication (Pearson chi-square .034), regular and effective school supervision and school administration's capability of utilizing funds effectively (Pearson chi-square .034). The conclusion is when the teacher has the ability to interpret the curriculum, and makes use of the syllabi during preparations; uses participatory learner centered methods through constructive use of instructional/learning materials hand in hand with timely assessment and evaluation of pupils' learning there should be an improvement in PSLE results. Effective horizontal and vertical communication and utilization of school funds are enabling characteristics that work towards improving the teachers' mastery of content and methodology.

7.6   The teacher carries out timely assessment and evaluation of pupils' learning

75.   With respect to whether a teacher "carries out timely assessment and evaluation of learning", all the teachers observed in all the 30 schools used the existing school-wide system of pupils assessment. No individual teacher initiatives for pupils' assessment were observed in all the 30 schools. The majority of schools (20 out of 30) on average gave 5 class exercises per subject per week, the remaining third gave less class exercises. An interesting finding is that teachers in more than 50% of the schools in the sample did not give homework at all. And 10/30 had variations whereby some of the teachers in those schools gave while others did not give. It is not surprising that it is the majority of those schools whose PSLE results are low that were found not to be giving homework to pupils. 6/30 schools did not give regular monthly tests. Also 27/30 observed schools had teachers setting questions that focused mainly on the cognitive domain. On marking pupils' work and giving feedback on time, 30/30 observed schools teachers marked and gave timely feed back to pupils. Some 24/30 observed schools teachers marked and made comments in pupils exercise books, and other assessment exercises while 6/30 (2, 3, 4, 6, 7 and 19) teachers did not. Overall, 20/30 schools did not discuss with parents the pupils' performance and teacher/pupil discussion of performance was observed in 7/30 schools. While in 25/30 schools observed, teachers kept some form of records on pupils performance, they did not display them in class. Of course, as a whole, school record keeping is not being well done across all the schools. Making an analysis *on* teachers' assessments of students, the characteristic has a relationship with the PSLE results (Yule's Q: 0.61; Pearson chi-square: .065) It has links with other characteristics such as "(teachers') mastery of content and methodology; effective horizontal and vertical communication and effective utilization of school funds by school administration, the school head's motivation of teaching and supporting staff as well as pupils, his/her professional support, and his/her monitoring and supervision of teachers." (See details in Annexes 4a, 4b and 4c). In all the schools observed pupils attempted to respond to questions asked by the teacher. Indeed, when the teacher carries out timely assessment and evaluates pupils learning through regular class exercises, homework, and regular monthly tests and when he/she marks and gives comments, discusses with parents pupils' performance, keeps information, and sets questions which focused on three domains, these activities should then lead to improved PSLE Results.

7.7   The Teacher Motivates Pupils for Effective Learning

76.   The research team hypothesized that school results will be high when teachers motivate pupils for effective learning by organizing study visits, rewarding them appropriately; use pupil-made materials and ideas during the teaching learning process and using pupil friendly language. Findings indicate that as far as organizing study visits for pupils are concerned, 8 out of 30 schools planned them and 4 schools out of these implemented the planned visits, while 22/30 neither planned nor made study visits for pupils. In the majority of schools, 21/30 teachers did not have their own system to provide physical rewards/incentives to pupils who excel in class but depended on the school-wide system where excelling pupils in the overall school per class were identified and given presents at the end of each year. The verbal reward system was very common in 27/30 schools. On the use of pupils made materials and ideas in teaching and learning process, in 23/30 observed schools, teachers did not have pupil made materials and pupil's hand works displayed in classes. 6/30 had a variation of one teacher who used pupils' made materials while 1/30 (School 9) had two teachers who had used pupil made materials. And researchers observed that the majority of teachers were using polite language (28/30 schools). The research team found that this characteristic has the strongest relationship to PSLE results (Yule's Q 1,

Pearson Chi- square .032). No school with low PSLE results received a high rating on this characteristic. Further analysis showed that, it has relationships with other characteristics that deal with 'Head teacher motivating teaching staff, supporting staff and pupils. In conclusion, when the teacher organizes and implements regular study visits, engages pupils in the teaching learning process, displays pupil made materials while teaching and comes up with innovative ways of rewarding good performance in class these efforts may lead to improved PSLE results.

7.8   Effective Horizontal and Vertical Communication by the school administration

77.   Review of school-level documents by the researchers revealed that overall 27 out of 29 schools held staff meetings except schools 9 and 11. School 23 had no data available by the time of the research team's visit regarding staff meetings. Interestingly only 16 out of 27 schools showed evidence to having held 50% or more of the required staff meetings during 2004 and 2005. Interviews with teachers and school heads indicated that resolutions made during staff meetings were generally followed up and acted upon. As far as holding quarterly School Committee meetings, 11 out of 30 schools had evidence to show that they had held such meetings although the frequency was far less than 50% of the mandatory requirement. Surprisingly in 19 out of 30 schools there was no evidence to show that these schools held regular quarterly school committee meetings. In regard to organizing school baraza (a general meeting for all teaching staff and pupils), 23 out of 30 schools were found to have held school baraza sessions. In case of parents /community meetings held and their resolutions implemented; in 20 out of 30 schools there was evidence to show that they held parents' meetings in 2005 and resolutions made were being acted upon. 8 schools of these were found to have had more than one parents' meeting. Statistical analysis revealed that this characteristic did not strongly correlate with the PSLE results. However, it was found to have very strong relationships with six other characteristics: teacher has mastery of content and methodology (Pearson chi-square .034), teacher's timely assessment and evaluation of pupils' learning (Pearson chi-square .050), teacher is a role model (Pearson chi-square .020), the teacher enable pupils to apply knowledge and skills (Pearson chi-square .037), the teacher considers gender and individual needs while teaching (Pearson chi-square .014) and parents send children to school (Pearson chi-square .0091). The Research team then concluded that if school administration held regular staff, school committee, baraza and parents meetings and acted upon the resolution made thereof then this will in a way influence the teachers' mastery of content and methodology and their timely assessment and evaluation of learning; improve parents support to their children leading to effective teaching/learning and consequently to improvement in pupils' learning outcomes.

7.9   Capability of utilizing funds and other materials effectively by the school administration

78.   The research team posited that schools that have the capacity to effectively utilize funds and other materials are likely to have better PSLE results. Four indicators of this characteristic were investigated (presence of a functional finance committee, proper management of school materials and equipment, enough and quality school buildings and adequate materials for teaching and learning) and the findings reveal that: 24 out of 30 schools had functional finance committees and were composed of both parents and teachers. In the other five schools 8, 11, 15, 26 and 27 the School Committee doubled as the finance committees as well. The Head teacher for school 2 was not at the school at the time of the visit and, therefore, files could not be accessed). The research team found evidence in 15 out of 29 schools that finance committee meetings were held regularly and in all schools, the school committees had been

trained in finance management, but in schools where the finance committees existed they had not organized any training for the members. As far as proper management of school materials and equipment was concerned, it was found out that 23 out of 28 schools had well kept finance documents except 2, 3, 6, 8, 10, 15 and 30: school 8 did not display finance documents, in school 10, the school committee had just been oriented by the time of the research team visit, and there was no evidence in schools 15 and 30 to show that they had a school budget. The Head teachers were not present in schools 2 and 3 for which financial documents were not available. There was evidence that 22 out of 30 schools carried out stock taking of school materials and equipment and 19 out of 30 schools had marked school properties. In regard to school buildings 24 out of 30 schools had buildings in good conditions but not enough. Details of this indicator refer to the characteristic of 'Adequate school infrastructure' and annexes 6 and 7 (see next section); and 25 out of 30 schools had a text book ratio of 1:3 while in the other 5 schools the ratio was higher.

79.   Statistical analysis of this characteristic revealed that it did not strongly correlate with PSLE results. However, it was found to have very strong relationships with six other characteristics: teacher has mastery of content and methodology (Pearson chi-square .034), teacher's timely assessment and evaluation of pupils' learning (Pearson chi-square .050), Head teacher is a role model (Pearson chi-square .001), effective and horizontal communication by school administration (Pearson chi-square .012), effective monitoring and supervision by Head teacher and other school administrators (Pearson chi-square .001) and timely release of funds from central and local government (Pearson chi-square .050). Given the above associations the research team concluded that the capacity to effectively utilize funds and other materials by school administration is a significant enabling characteristic that if present in schools will positively influence the performance of teaching and learning processes for better results.

7.10 Adequate school Infrastructure

80.   As for school infrastructure, in 25 out of 30 schools, the classroom pupil ratio (Annex 6) was far above the recommended ratio (1: 40) except in schools 4, 7, 14, 15, 16 and 23 which, operated a double shift system. For instance, 8 out of 24 schools had a classroom pupil ratio of 1: 80 and above and 9 out of 30 schools had more temporary than permanent classrooms. The Research team during school visits observed overcrowding especially in lower primary classes. The majority of schools had a desk pupil ratio of 1: 4 except 11, 12, 14, 16 and 21. 17 out of 30 schools had at least 5 toilet stances for girls and boys respectively. As far as teachers' houses are concerned, overall, schools had very few teachers' houses: 4 out of 30 schools did not have teachers' houses at all (6, 5, 9 and 18), 16 out of 30 schools accommodated less than 50% of their teachers and only 7 schools were found providing accommodation to over 50% of the teachers. Most schools had at least two offices except schools 1 and 20. These had one each. 3 out of 30 schools did not have offices at all (9, 13 and 20). Exceptionally, however, 8 out of 26 schools had 3 offices each. In addition, 15 out of 30 schools did not have a store at all and school 12 had 4 stores. Statistical analysis showed that this characteristic has a relationship with the PSLE Results of (Yule's Q 0.64.and Pearson chi-square .058) it also correlates with capability of utilizing funds and other material effectively by school administration and teacher motivates pupils for effective learning. The research team then concluded that school infrastructure is an enabling characteristic: when adequate in schools the infrastructure will positively influence the teaching and learning processes leading to improved school outcomes

81.   This chapter has presented the findings for the study as well as the conclusions for each of the school characteristics that were prioritized. The findings revealed a clear pattern of characteristics which are associated in influencing pupils learning as measured by PSLE results. These have been summarized in this chapter in the conceptual framework in Figure 7.1. Characteristic to characteristic

associations have also been explored and presented and the most significant enabling characteristics and their relationships shown on the same diagram.

7.11 Conclusion

82.   In conclusion of this chapter, the study has found out that the 'critical path' of characteristics that can influence PSLE results and other learning outcomes in Singida region is to have teachers who motivate pupils for effective learning they can do this if they have mastery of the subject matter they teach and of the methodology they use during teaching particularly those methods that encourage pupils' interaction with different learning resources during the learning process; and they carry out timely assessment and evaluation of pupils' learning. The teacher's performance depends on the Head teacher who is a role model, i.e. he/she is consistent with his/her duties, follows his/her daily program, has a proper filing system and analyses school level information for planning and decision making, is punctual and regular at school and engages in classroom teaching when well prepared; and their performance depends on the effective monitoring and supervision of school activities by the school administration. The teachers' and head teachers' effectiveness is further enhanced if the school has an adequate infrastructure, there is effective horizontal and vertical communication and if the school administration has the capability to utilize school funds and other materials effectively. This relationship of critical and enabling characteristics has been illustrated in Figure 7-1.

8. RECOMMENDATIONS

83.   The following recommendations are based on the study findings and on the research team's analysis of the potential obstacles that may hinder improvements in the identified priority characteristics. The recommendations are driven by the belief that significant gaps in the improvement of pupils learning outcomes need to be contextualised in order to address local realities within Singida region. This is a shift away from supply side to demand side concerns at different intervention levels - school, district, regional and policy.

8.1   Strengthen the head teachers' and other school administrators' capacity to monitor and supervise school activities

84.   This can be done by adopting a comprehensive range of performance improvement strategies/activities to particularly strengthen their pedagogical monitoring and supervisory capacity. These could include hands on coaching and mentoring, peer coaching (For example, a strong Head teacher could be paired with weak Head teachers of neighboring schools). Other strategies could include training head teachers in clusters to build their sense of teamwork, organizing formal/informal meetings to share best practices and change head teachers negative attitudes and practices that hinder growth of effective schools; and facilitating joint planning and training among key educational players within the ward, division, and district. A key component during these capacity enhancing activities should be improving information management and utilization at school and district levels. Furthermore, DEOs should organize orientation activities for newly appointed head teachers before they take on headship responsibilities. There is a need to involve the District Executive Directors and other education managers so that they can facilitate efficient service delivery in the education process. This will ensure that schools are visited and have the problems in the schools solved in good time.

85.   The researchers also felt that the current ambiguities in the relationships and communication channels among different education stakeholders at the national, regional, district, division, ward and school level made it difficult for external supervision and professional support to be effective. Further study may be required to explore such relationships and how they impact ultimately to the quality of learning in the schools.

8.2   Enhance schools' capacity to effectively utilize available text books, including other teaching/ learning resources

86.   Schools should design strategies that enhance teachers' and pupils' capacity and interest to utilize available text books and other teaching/learning resources within and outside the school. Strategies could include organizing school-based training programs for teachers in the use of varied teaching/learning resources including involving pupils in the development of teaching/learning aids; furthermore, schools should develop mechanisms to enforce the borrowing of books by pupils to use them both at school and at home. Other strategies include creating friendly reading rooms at school, classroom reading corners, initiating reading competitions, organizing book fairs at both school and other levels. At a regional level a policy of 'putting books in the hands of the pupils' should be developed and implemented. There is the need to share best practices in the field.

8.3 Improve all teachers' mastery of the subject matter and teaching methods

87.   Failure by teachers to interpret the curriculum, to prepare schemes of work and lesson plans that are in line with the syllabus, to use learner-centred teaching methods and to use instructional materials effectively are indicative partly of attitude, knowledge and skill gaps not consolidated during training. There is need therefore to identify innovative interventions that will be used to train teachers in various learning gaps. Particularly teachers should be sensitized to appreciate the impact of using participatory teaching and learning methods and techniques on pupils' learning outcomes. Other knowledge and skills gaps are in the areas of interpreting the curriculum and the syllabus. The current schools based seminars on participatory teaching methods and techniques are a step in the right direction but if real impact is to be achieved closer attention should be paid to the content, duration and timing of such training. Support supervision at school level should be a major component. TRC coordinators and Head teachers should be strengthened to provide the much needed support to teachers to develop their skills and confidence. There is also the need to organize study visits as well as developing debates within and outside the schools. In addition, there is need to improve the teaching capacity using recorded TV cassettes in schools and in the use of electronic media including the use of computers.

88.   Other interventions should include: schools should introduce subject clubs for both teachers and pupils and in wards (the ward is the lowest administrative unit) in order to help teachers master the subject content at the same time improving learning achievement among pupils. Pupil's assessment strategies should be reinforced and supervised at the ward and division level by the DEOs. Head teachers need to ensure that the syllabuses and didactic materials are in schools. For any change in the syllabuses, there is the need to have teachers given thorough orientation before the implementation of the changes. The DEOs offices need to ensure that all schools have sufficient copies of school curricula/syllabuses and all teachers to be sufficiently trained in the interpretation and use of the curricula/syllabuses.

8.4 Motivate head teachers and teachers

89.   This can be done by improving teachers' working environment by providing clean and safe water at/near the school, spacious staff rooms, teachers' houses, and provision of a mid day school meals for teachers. In addition, communities should be sensitized in order to organize teacher incentive programs in schools. Other incentives could be ensuring fair distribution of training opportunities among teachers; timely release of teachers' salary, paying double shift teaching and hardship allowances where applicable and Head teachers to be paid special responsibility allowance. At the same time school-level strategies should be developed/strengthened to recognise and reward good performance among teachers and Head teachers on specific identified characteristics/indicators. In the long term, improvement of teachers' working conditions e.g. teachers' welfare, improvement of salaries, provision of special allowances need to be provided appropriately as it deem feasible. Recognizing the poverty level of parents in the communities, the capitation/development grant needs to be increased so as facilitate availability of required facilities in the schools. In addition, councils should develop programmes/strategies for building teachers' houses near the schools as this will reduce the disturbances of teachers renting in an inappropriate environment for the preparation of pupils' work. This can be done through the involvement of the community/parents taking into account the allocation of teachers in schools as the PEDP construction of houses has not been done at the same pace as the construction of classrooms.

8.5 Develop and implement guidelines that clarify the roles, relationships and linkages among regional stakeholders

90.   These include among others the District Executive Director; Inspectorate, Municipal Education officer, Ward Education Officers and other district education officials, Teacher resource centre coordinators, teacher colleges and school level stakeholders both within the school and the communities. This will reduce on the current ambiguity and increase opportunities for collaboration and coordination as a way of establishing an effective system towards improved schools outcomes. Part of the ambiguities include: unclear reporting centres and lack of clear guidelines in implementing school inspectors report by DEO and the system of administration from the District Executive Director to the teacher not being linear.

8.6 Reduce overcrowding in classrooms and enhance fair distribution of teachers in schools

91.   In the short term, the Regional and District education offices should work out a strategy to speed up the implementation of the double shift system in schools that have overcrowded classes. In the long term plans for splitting overcrowded schools should be developed and implemented. The District Education officials should ensure a fair deployment and distribution of teachers in schools. There is therefore need to have the DEOs to prepare a full establishment of teaching staff for each school. Infrastructure in schools need to be improved for the schools which are missing the basic buildings and facilities like the library, the school stores, teachers' houses, classrooms and desks that will reduce overcrowding in classes. Indeed there is the need to involve the communities in Singida where the schools are situated in improving the working conditions for teachers in the villages. This would enable teachers to have decent accommodation for influencing teachers to be effective in the preparation of their schemes of work, lesson plans and lesson notes. It would also enhance the timely assessment of pupils' work as teachers would have the conducive working environment for marking pupils' work.

8.7 Facilitate dissemination events of the study findings and recommendations

92.   The REOs and DEOs and other interested education stakeholders should facilitate the researchers to share the findings and the recommendations of this study in their respective districts/schools by developing a programme whereby researchers in groups disseminate in workshops/seminars the findings of the study in their respective districts. Furthermore, the Head teachers and TRCs that have participated in this study should be monitored to ensure that they implement recommendations of the study in their respective areas of jurisdiction. Specifically, the DEOs and academic Officers for each district should translate the recommendations into work plans to be implemented in the short term and some in the long term. A summary report and the recommendations should be translated in Kiswahili and disseminated to all the schools in Singida region. This would allow for a wider audience to have access to the study findings. At the national level, the Tanzania Institute of Education should organize a national dissemination workshop for the wider audience. This workshop would come up with important decisions at the national level for improving pupils' outcomes.

93.   The Tanzania Institute of Education or any other interested stakeholder in collaboration with the ministry should replicate the study in other regions or districts of Tanzania in order to inform local decision-making and resource allocations. The trained team from Singida would help to train and guide others in a replication of the study.

Endnote

[1]There were three subjects (Language, Mathematics and General Knowledge) and the grading were as follows for the years 2001, 2002 and 2003.
Grade A ranges from 121 - 150
Grade B ranges from 91 -120
Grade C ranges from 61 - 90
Grade D ranges from 31 - 60
Grade E ranges from 0 - 30

[2]The pass rate considers only the scored grades of A, B and C. The pupils scoring grades D and E are considered to have failed the Primary School Level Examination.

9. ANNEXES

Annex 1: Members of the Research Team

Name	Function/Current position	Academic and pedagogical training	Number of years of experience	Telephone & email address
Alphonse Michael	Head teacher	IIIA	9	P. O. Box 40 Kiomboi Phone 0748426383
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Esther Fillipo Mzengi	Head teacher	IIIA	25	P. O. Box 233 Singida, phone 0748424421
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Frederick Mukebezi	Curriculum Developer Tanzania Institute of Education	Master Degree	15	P.O. Box 35094 Dar es Salaam, phone 0744956366/0748665718 fremuke@yahoo.co.uk
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John N Mwandezi	School Inspector	Diploma	14	B. O. Box 190 Manyoni, phone 0745407227
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Lazaro Samhenda	Teachers' Resource Centre Coordinator	Diploma	12	P. O. Box 40 Kiomboi, phone 0748446786
Mwanahamisi Jokolo	Curriculum Developer/	Master Degree	9	P.O. Box 35094 Dar es Salaam, phone 0744515449 Email: mishyjokolo@yahoo.co.uk
Tatu M. Bunku	Head teacher	Diploma	13	P.O.Box 148 Manyoni, phone 0745917902
Ward Heneveld	Consultant			Vermont USA
Alice Ndidde	Consultant			Makerere University, I...A.C.E
Swai Fulgence	Consultant			Ministry of Education and Culture (MoEC).

Key: IIIA –O'Level Education and two years in a Teachers' Training College.
Diploma – Form six (A level) and two years in a Teachers' Training College.

ANNEX 2a: The Framework of characteristics

Factor: An effective and competent teacher

<table>
<tr><td colspan="2">Definition: An is teacher is considered effective and competent when:

1. Has mastery of the content and methodology he/she is teaching
2. Carries out timely assessments and evaluation of learning
3. Motivates pupils for effective learning
4. He or she is a role model
5. Enables pupils to applying knowledge and skills
6. Puts into consideration gender and individual needs and differences while teaching</td></tr>
<tr><td align="center">Characteristic</td><td align="center">Indicator</td></tr>
<tr><td>Has mastery of the content and methodology he/she is teaching</td><td>(a) Ability to interpret the curriculum
(b) At least he/she has completed Grade III A
(c) Ability to deliver materials accurately
(d) Uses participatory method e.g. discussion.
(e) Uses instructional materials effectively</td></tr>
<tr><td>Carries out timely and effective assessments and evaluation of learning</td><td>(a) Prepares and gives appropriate class exercises, homework and tests
(b) Marks pupils' work and give feedback on time.</td></tr>
<tr><td>Motivates pupils for effective learning</td><td>(a) Organize study visits
(b) Rewards pupils appropriately
(c) Uses pupils made materials and ideas in teaching and learning process
(d) Uses pupil friendly language</td></tr>
<tr><td>He/she is a role model</td><td>(a) Manages well the class
(b) Clean and well dressed
(c) Regular and Punctual</td></tr>
<tr><td>Enables pupils to applying knowledge and skills</td><td>(a) Teacher encourages pupils to develop independence and take their own responsibilities
(b) Pupils show high degree of involvement and initiative
(c) Teaching methods encourage problem solving and creativity
(d) Constructive use of textbooks and supplementary books</td></tr>
<tr><td>Consideration of gender and individual needs and differences</td><td>(a) The teacher distributes class activities to both boys and girls
(b) The teacher uses girl and boy friendly language
(c) Teacher has initiatives to address gender and individual needs/differences</td></tr>
</table>

Factor: Effective School Administration

Definition: School administration is considered to be effective when:

1. There is regular and effective horizontal and vertical communication
2. There is effective monitoring, and supervision of school activities
3. The head teacher is a role model
4. There is motivation of teaching staff, supporting staff and pupils

Characteristic	Indicators
There is regular and effective horizontal and vertical communication	(a) Holding monthly staff meetings (b) Measures taken in response to monthly staff meetings' resolutions (c) Holding quarterly school committee meetings (d) School Baraza sessions (e) Parents/community meetings held and their resolutions (f) Copies of letters sent and received from higher authorities, communities and parents
There is effective monitoring, and supervision of school activities	(a) Checks and endorses teachers' schemes of work and lesson plans (b) Provide feed back to teachers (c) Follows up pupils' performance (d) Availability of an up to date subject logbook (e) Mechanism in place for teachers' performance appraisal (f) Mechanism in place for school committee to check on the performance of school activities
The head is a role model	(a) Display of important information and having a proper filing system (b) Analyses school level information for decision making (c) Displays schools rules and regulations (d) Punctual and regular at school (e) Consistence in his/her duty (f) Engages in Classroom teaching (g) Clean and well dressed
Motives teaching staff, supporting staff as well as pupils	(a) Provision of lunch/tea for staff (b) Feeding programmes for pupils (c) Delegation of power (d) Existence of subject committees (e) Organizes and allows staff to attend in-service courses and workshops (f) Rewards pupils and staff

Factor: Effective Financial and Material Support

Definition: Financial and material support is considered effective when: 1. The funds from the Central and Local government are timely released to schools 2. There is financial and material support from other stakeholders 3. School administration is capable of utilizing fund effectively.	
Characteristic	*Indicator*
Funds from the Central and Local government timely released	(a) Date when monthly and quarterly bank statement arrive at school (b) Records of capitation grant and development grant (c) When school finance records are submitted on time
There is financial and material support from other stakeholders	(a) Types and sources of support
School administration is capable of utilizing fund effectively	(a) Functional school finance committee (b) Availability of well kept files of school financial documents (c) Proper management of school materials and equipment (d) Enough and quality school building (e) Adequate material for teaching and learning

Factor: Professional Support and School Supervision

Definition: Professional support and School supervision is considered effective when: 1. There is regular and effective external supervision 2. Effective professional Support	

Characteristic	Indicator
Regular and effective external supervision	(a) Supervisors make regular and focused visits to school (b) External supervisors discuss and give feedback and advice on school's whole plan (c) There is mutual relationship between teachers, supervisors and the Head teacher (d) Implementation of supervisor's recommendations
Effective professional Support	(a) DEOs/TC/TRCs organize in-service training and seminars for the school (b) There is coordination and regular follow up in schools (c) DEOs/TC/TRCs organize the implementation of the Teachers' up-grading programmes

Factor: Community involvement

<table>
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Definition: Community involvement is effective when:

1. The child is provided with basic needs by parents
2. Parents send children to attend school and visit the school regularly
3. Parents and community provide financial and material support

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<tr><td>*Characteristic*</td><td>*Indicator*</td></tr>
<tr>
<td>The child is provided with basic needs by parents</td>
<td>

(a) Pupils have full school uniform
(b) Clean and well dressed
(c) The pupils have scholastic materials
(d) Feeding programmes
(e) Community initiatives for orphans and the needy

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<tr>
<td>Parents send children to attend school and visit the school regularly</td>
<td>

(a) Regular attendance of pupils at school
(b) Pupils' punctuality at school
(c) Implementation of resolutions by parents to ensure children's regular attendance
(d) Parents' visit timetable at school
(e) Parents' disciplinary records
(f) Parents' meetings resolutions
(g) Parents' day and parents' meeting

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<tr>
<td>Parents and community provide financial and material support</td>
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(a) Parents financial and material contribution
(b) Community financial and material contributions

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ANNEX 2b: Design documents

Factor: **Effective and competent teacher**
Characteristic: **Mastery of content and methodology**

Indicator	Specifics of what to observe/look for	How to find this out
(a) Ability to interpret the curriculum	(i) Whether the content of schemes of work, lesson notes and lesson plans matches that of syllabus (ii) Whether while teaching follows the schemes of work, lesson notes and plans in relation to the syllabus • Objectives relevant to the content • Sequencing of topics	• Check lesson plan, lesson notes, timetable, schemes of work and syllabus and subject log book • Observe teaching and the learning process
(b) At least he/she has completed Grade III A	i. Teacher qualification	• Check seniority list • Teacher personal file
(c) Ability to deliver subject matter accurately	i. Accuracy of subject matter while teaching ii. Responses to pupils questions iii. Accuracy of subject matter in class notes iv. Teaching and learning process v. Proper use of language of instruction	• Observe teaching and learning process • Check lesson plan and notes
(d) Uses participatory teaching methods	i. Use of learner centred methods in classroom example discussions, role plays, drama, group work, etc. ii. Pupils engaged in a variety of activities in class and outside the class e.g. pupils asking questions iii. Specific activities that will involve pupils in class activities found in scheme of work and lesson plans	• Check lesson plan • Check pupils' activities • Check classroom interactions
(e) Uses instructional materials effectively	i. Whether teacher is using text books and teaching aids during class instruction ii. Up to date teaching and learning materials displayed in classrooms iii. Number of pupils with textbooks and using them in classroom iv. Variety of instruction materials found in class v. Is the use of instructional materials reflected in lesson notes?	• Classroom observation • Ask pupils questions about the displayed work • Check pupils to book ratio • Asking pupils about the usage of textbooks • Check exercise book.

Factor: **Effective and competent teacher**
Characteristic: Carries out timely assessment and evaluation of learning

Indicator	Specifics of what to observe/look for	How to find this out
(a) Prepares and gives appropriate class exercises, homework, and tests	(i) Mechanisms for pupils' assessment and evaluation (ii) Types of questions teacher sets (three domains of learning- cognitive, affective and psychomotor) (iii) Frequency of homework given by the teacher weekly (iv) Number of tests given by the teacher per month (v) Number of classes exercises given in a week	• Ask teachers on the mechanism used to assess and evaluate pupils' learning. • Check: pupils test paper, papers pupils' exercise books • Check school time table • Check assessment records
(b) Marks pupils' work and gives feedback on time	(i) Teachers' marks and comments in the pupils' work (ii) Statistical data for pupils' performance (iii) Mechanism of keeping pupils' work (iv) Whether all exercises given to pupils are marked and feedback given (v) Whether teacher discusses pupil performance with pupil and parents (vi) Whether the content in the exercise books is marked accurately	• Check pupils' exercise books and remarks made • Check pupils' performance records in the Academic/Head teacher/staff room • System of filing pupils' progress records.

Factor: **Effective and competent teacher**
Characteristic: Motivate pupils for effective learning

Indicator	Specifics of what to observe/look for	How to find this out
(a) Organize study visits	(i) Number of study visits planned and done (ii) Study visits' budget (iii) Letters of visits' correspondence	• Check study visit reports in the Head teacher's office • Check budget in the visit file in the Head teacher's office. • Check file for correspondence of letters • Ask pupils and teachers.
(b) Rewards pupils appropriately	(i) Mechanism for rewarding successful pupils (ii) Number and types of physical rewards (iii) Number of verbal words by a teacher	• Check teachers' comments provided in pupils' exercise books • Check pupil's records in the Head teacher's office • Check file kept types of certificates awarded in the Head teacher's office • Ask pupils/teachers/ • Classroom observation
(c) Uses pupils made materials and ideas in teaching and learning process	(i) Pupils hand works (ii) Display of pupils made material	• Observe hand works products/materials made in classroom corners/classroom walls/school ground/store room • Observe classroom teaching • Ask pupils if they make teaching aids
(d) Uses pupil friendly language	(i) Interaction of teachers and pupils (ii) The spoken language to pupils by teachers	• Observe classroom interaction • Ask pupils

Factor: **Effective and competent teacher**
Characteristic: Role model

Indicator	Specifics of what to observe/look for	How to find this out
(a) Manages well the class	i. Timely arrived at the class ii. Proper classroom sitting arrangement and cleanliness iii. Maintaining discipline iv. Proper presentation of subject matter v. Consider individual needs and gender differences vi. Proper use and distribution of teaching and learning materials vii. Regularly assesses and evaluates teaching and learning processes viii. Organized (filing system, display of important information)	• Classroom observation • Check pupils' attendance register • Check timetable • Check pupils' exercise books, tests • Assignment and examination • Ask pupils.
(b) Clean and well dressed	i. Dresses according to the official ethics ii. Cleanliness of clothes iii. Smartness	• Observe teachers general appearance • Ask teachers
(c) Regular and punctual	i. Time of arrival in the school and in the classroom ii. Obey and follows school rules and regulations iii. Adheres to the master timetable, class timetable and personal timetable iv. Consistent in his/her duties and attendance v. Frequency of school attendance	• Check master timetable • Check teachers' attendance register • Check pupils' exercise books • Check teachers' personal file • Check class logbook.

Factor: Effective and competent teacher
Characteristic: **Enables pupils to apply knowledge and skills**

Indicator	Specifics of what to observe/look for	How to find this out
(a) Teacher encourages pupils to develop independence and take their own responsibilities	i. Assigns individual or group activities to pupils and nature of teachers' supervision ii. Textbooks in the hands of pupils iii. Pupils doing experiments iv. Class demonstration plots and projects	• Observe pupils handwork/products/materials used and experiments in and outside the classroom • Check pupils' ownership of materials/plots
(b) Pupils show high degree of involvement and initiative	i. Displayed instructional materials and other relevant aids ii. Pupils work displayed for various subjects in relation to topics covered iii. Out of class initiatives by pupils	• Observe classroom • Interview pupils • Talk to teachers
(c) Teaching methods encourage problem solving and creativity	i. Pupils responses to teacher's questions ii. Use of open ended questions with consideration of different levels i.e. from facts to application	• Observe number and clarity of pupils responses • Check questions on the black board • Check questions in teachers lesson plans and lesson notes
(d) Constructive use of textbooks and supplementary books	i. Textbooks in hands of pupils ii. Whether teacher allows pupils to get information from various sources about a topic being taught iii. Availability of loan books	• Observe distribution of textbooks in class • Ask pupils • Check loan book

*Factor***: Effective and competent teacher**
*Characteristic***: Gender and Individual Needs/Differences**

Indicator	Specifics of what to observe/look for	How to find this out
(a) The teacher distributes class activities to both boys and girls	i. Allocation of work inside and outside the classroom ii. Composition of groups in class and outside activities iii. Do both boys and girls answer/ask questions in class	• Observe the teaching and learning process • Observe formation of class groups • Check pupils' involvement in answering questions • Observe where girls sit and where boys sit • Observe sitting arrangement of pupils in classroom on each desk
(b) The teacher uses girl and boy friendly language	i. Language teacher uses to talk to girls and boys ii. The language the teacher uses to prepare his/her lessons plan whether reflects and gender sensitivity	• Observation in the class • Check lesson plans and lesson notes • Listen to the way the teacher responds to questions asked by boys and those asked by girls • Ask pupils
(c) Teacher has initiatives to address gender and individual needs/differences	i. Where do pupils with disabilities sit? The pupils' sitting plan ii. Activities developed by teacher to cater/address the needs of girls and boys as well as for pupils with learning disabilities iii. Rules developed by teacher for protecting girls from being harassed by boys and vice versa. iv. Teaching techniques used by the teacher v. Teaching and learning materials the teacher used during the learning process. vi. Sitting manner/plan for girls and boys in class	• Examine class sitting plan • Observe the teacher teaching, the materials he/she uses and the teaching aids • Ask pupils both boys and girls • Ask teachers

Factor: Effective school administration
Characteristic: Effective horizontal and vertical communication

Indicator	Specifics of what to observe	How to find out
(a) Holding monthly staff meetings	i. Number of staff meetings held in 2004 and 2005 academic years ii. Number of staff meetings shown on a yearly calendar	• Check staff meeting file • Observe in the Head teacher's office and staff room • Ask Secretary of staff meetings
(b) Measures taken in response to monthly staff meetings' resolutions	i. Content of staff meeting resolutions ii. Number of resolutions made and those acted upon	• Check staff meeting file • Direct observation of physical things done as a result of resolutions • Ask teachers/Head teachers
(c) Holding quarterly school committee meetings	i. Number of school committee meetings held in 2005 academic year ii. Number of resolutions made and those acted upon iii. Content of resolutions iv. Time table of School Committee meetings	• Check in the school committee file • Ask the Chairperson of the School Committee and some of its members • Ask Head teacher • Check if time table is displayed •
(d) School Baraza sessions	i. Number of School Baraza sessions held in 2005 academic year ii. Content of School Baraza meetings iii. Resolutions made and acted upon iv. Time table for the School Baraza	• To interview teachers head boy/head girl and pupils, • See school time table • Look at the General time table • Look at the calendar
(e) Parents/community meetings held and their resolutions	i. Number of parents/community meeting sessions held during 2004 and 2005 ii. Number of resolutions made iii. Content of resolutions iv. Number of resolutions acted upon	• Check parents/community meeting file • Ask the Chairperson and some members of the School Committee and some parents
(f) Copies of letters sent and received from higher authorities, communities and parents	i. Number of letters sent to and their contents to higher authorities e.g. ward, council, regional, MoEC during 2005; ii. Number of letters received and their content from higher authorities, communities and parents during 2005	• Check copies in the Head teacher's office.

*Facto*r: **Effective school administration**
Characteristic: **Effective monitoring and supervision of school activities**

Indicator	Specific of what to observe	How to find out
(a) Endorses teachers' schemes of work and lesson plans	(i) Sign, stamp and comments of the head teachers on teachers' schemes of work and lesson plan (ii) Head teacher's Daily programme	• Check to with head teachers and teachers • Face to face interview with teachers • Head teacher's dairy
(b) Provide feed back to teachers	(i) Signed document by the head teacher (ii) Regular informal meeting between Head teacher and teachers	• Observe sign document • Face to face interview with teachers/head teacher
(c) Follows up pupil's performance	(i) Regular check up of pupils exercise books (ii) Checks assessment records (iii) Checks pupils' attendance (iv) Disciplinary measures taken	• Check attendance book for head teacher's comments • Check pupils' exercise books • Face to face interview with Head teacher on action he /she has taken on attendance pupils performance • Ask pupils • Check black book
(d) Availability of an up to date subject logbook	(i) Existence of subject logbook (ii) Signed, stamped and comments of the Head teacher.	• Check with the teachers • Ask teachers/Head teacher
(e) Mechanism in place for teachers' performance appraisal	(i) The letter for appraisal (ii) Agenda of teacher's appraisal (iii) Grades of appraisal	• Check minutes of staff meetings • Check with the open files of the teacher • Interview teachers and the Head teacher
(f) Mechanism in place for school committee to check on performance of school activities	(i) Time table for school committee to inspect school activities (ii) Staff /school committee meetings (iii) Number of times members of school committee visits school to discuss academic performance	• Ask teachers • Ask head teacher • Talk to a member of school committee and chairman of the school committee

Factor: Effective School Administration
Characteristic: **Head teacher is a Role Model**

Indicator	Specific of what to observe	How to find out
(a) Display of important information and having filing system	(i) Proper filing system (ii) Teachers' particulars (iii) Information on pupils (iv) Information on infrastructure (v) School funds documents (vi) School plan (vii) School time table	• Observe what is on the school notice board • Check on the walls of Head teacher's office • Check with the relevant files • Ask Head teacher for filing system
(b) Analyses school level information for decision making	(i) Presence of analyzed information (ii) Actions taken by the Head teacher as a result of analyzing school level information	• Check in school files, • Check on the walls of head teachers office • Ask head teacher • Ask academic teacher
(c) Displays school rules and regulations	(i) Whether school rules and regulations displayed in head teachers office (ii) Content of school rules in relation to pupils' completion and performance	• Observe in the respective classrooms and school notice board, staff rooms and Head teacher's office
(d) Punctual and regular at school	(i) Daily attendance of the Head teacher (ii) Time of Head teacher's arrival in the school (iii) Marking and signing in teachers' attendance book	• School attendance for teachers • Ask Head teacher • Ask teachers • Check school time table
(f) Consistent in his/her duty	(i) Supervision of teachers in allocated tasks (ii) Frequency of checking teacher's attendance book, schemes of work, lesson plan and lesson notes (iii) Head teachers daily programme	• Check teachers' subject logbooks • Ask the Head teacher about his daily programme • Ask parents • Ask chair school Committee
(f) Engages in classroom teaching	(iv) Subjects taught by head teacher (v) Whether Head teacher has well prepared schemes of work, lesson plans, and lesson notes	• Check school time table • Ask teachers • Check head teachers schemes of work, lesson plans, and lesson notes
(h) Clean and well dressed	(i) Dresses according to the official ethics (ii) Cleanliness of clothes (iii) Smartness	• Observe head teachers general appearance • Ask teachers

Factor: **Effective School Administration**
Characteristic: **Motivates teaching and supporting staff as well as pupils**

3.3.1.1.1.1 Indicator	Specific of what to observe	How to find out
(a) Provision of lunch/tea for staff	(i) Meal timetable (ii) Content of meals	• Existence of tea break • Ask teachers • Ask the Head teacher
(b) Feeding programmes for pupils	(i) Meal time table (ii) Number of meals provided per day (iii) Whether children come to school with packed lunch	• Observation on kitchen/stores • Ask pupils • Ask parents • Ask parents • Ask the cook • Ask teachers/Head teacher
(c) Delegation of power	(i) Distribution list if teachers ' duties and responsibility (ii) Letters of delegation when away from school (iii) Responsibilities performed by different teachers in the school	• Head teachers' office notice board/staff room notice board • Teachers' responsibilities file • Ask teachers • Ask the Head teacher
(d) Existence of subject committees	(i) Committee meetings' minutes (ii) Content of the minutes (iii) Number of school subject seminars	• File • Minutes • Ask teachers • Ask the Head teacher.
(e) Organizes and allows staff to attend in-service training courses and workshops	(i) Number of teachers who have attended in-service training (ii) Number of school based seminars, workshops organized at school (iii) Objectives and content of the seminar/workshops (iv) In service training schedule	• In-service training/seminars files • Ask academic teacher • Ask teachers • Check TRC's file • Check the teachers' files
(f) Rewards pupils and Staff	(i) Number of pupil and teachers rewarded (ii) Types of rewards (iii) Reasons for rewarding	• Ask pupils • Ask Head teacher and teachers • Ask academic teacher • Staff meeting file

Factor: **Financial and material support**
Characteristic: **Timely release of Funds from Central and Local Government**

Indicator	Specific of what to observe/look for	How to find out
(a) Date when monthly and quarterly bank statement arrive at school	(i) Bank statement of each month or quarter (ii) Challenges of delayed release (iii) Duration of delays	• Check at Head teacher's office files • Ask head teacher • Ask school treasurer
(b) Records of capitation grant and development grant	(i) Updated cash books of Capitation grant and Development grant	• Check with the Head teacher's office, • Ask teacher dealing with school finances, • Ask other teachers, • Talk to School Committee.
(c) When school finance records are submitted on time	i. Dates of submission of school finance reports on capitation grants	• Check on quarterly finance committee file

Factor: **Financial and material support**
Characteristic: **Financial and material support from other stakeholders**

Indicator	Specific of what to observe	How to find out
(a) Types and sources of support	(i)Evidence of letters from stakeholders on contributions (ii) Amount received and source (iii) Quantity of materials received (iv) Receipts, payment vouchers, equipment and materials	• Direct observation in the Head teachers office • Ask the teacher dealing with school finances • School Committee. • Observe physically in school, store by counting with the teacher in charge of the school store.

Factor: **Financial and material support**
Characteristic: **Capability of utilizing funds and other materials effectively**

Indicator	Specific of what to observe	How to find out
(a) Functional school finance committee	i. Frequency of meetings (2005) ii. Composition of school finance committee iii. Finance documents prepared by the school and the teacher dealing with school finances (Budget, financial reports, etc) iv. Relevant finance documents displayed on school notice board v. Capability of finance committee (any training)	• Check the notice board • Check finance committee files • Ask H/Teacher • Ask staff member • School committee member
(b) Proper management of school materials and equipment	i. Frequency of stock taking ii. Is school property properly marked? iii. Availability of a book store iv. Condition of school buildings	• Examine store ledger • Check on school furniture • Observe school buildings • Ask the teacher in charge of the school store

(c) Enough and quality school building	i. Number of
	  • classrooms,
	  • offices,
	  • teacher houses,
	  • toilets,
	  • store,
	  • library
	  • teachers' shelves
		• Visit, observe and count school buildings and material

(d) Adequate material for teaching and learning	i. Recommended textbooks and their numbers ii. Usable blackboard and chalk in each classroom iii. Teaching aids and models displayed in class, iv. Office stationery, v. Desks per classroom vi. Teachers' tables and chairs vii. Shelves in staff rooms viii. Exercise books/pens/pencils	• Observe displays in the classroom, staff room • Ask pupils • Talk to school librarian • Observe where books are kept • Check distribution list of exercise books/pens/pencils

Factor: Professional Support and School Supervision
Characteristic: **Regular and Effective external supervision**

Indicator	Specific of what to observe	How to find out
(a) Supervisors make regular and focused visits to school	(i) Number of visits made since 2004 and 2005 (ii) Objectives of the visits (iii) Availability of inspectors reports (iv) Issues raised by inspectors in the reports	• Check visitor's book • Ask the Head teacher, teachers and pupils • Check inspectors' file • Check log book
(b) External supervisors discuss and give feedback and advice on school's whole plan	(i) Supervisors', DEO's, reports on school whole plan (ii) Measures taken by Head teacher	• Check finished activities in the Head teacher's report • Ask the Head teacher what was done by school
(c) There is mutual relationship between teachers, supervisors and the Head teacher	(i) Letter from the supervisors (ii) Feedback meetings with inspectors (iii) Letters of notification from the inspector specifying dates and objectives of visit	• Consult Head teacher, and teachers • Check inspectors' file
(d) Implementation of supervisors' recommendations	(i) Recommendations made by supervisors (ii) Report on use of store ledger book (iii) Measures taken by Head teachers and other teachers	• Ask teachers • Check inspectors file and reports • Consult Head teacher

*Factor***: Professional Support and School Supervision**
Characteristic: **Effective Professional Support**

3.3.1.1.1.2 Indicator	Specific of what to observe	How to find out
(a) DEOs/TC/TRCs organize in-service training and seminars for the school	(i) Number of in-service training and seminars organized at the school in a year (ii) Number of teachers who attended the seminars and in-service training (iii) Categories of teachers involved in seminars and in-service training (iv) Types of a seminar/workshop and in-service training provided	• Check in-service training/seminar file • Check logbook • Ask the Head teacher • Ask teachers • Check learning materials provided
(b) There is coordination and regular follow up in schools	(i) Whether the content of the seminar are implemented (ii) Objective of the follow up	• Ask Head teacher • Ask teachers • Check logbook • Check in-service training and seminars' file
(c) DEOs/TC/TRCs organize the implementation of the Teachers' up-grading programmes	(i) Number of teachers up-graded (ii) Types of books and study materials provided (iii) Types of up-grading programmes provided	• Ask Head teacher • Check the in-service training file • Ask teachers

*Factor***: Community involvement**
Characteristic: **The child is provided with basic needs by parents**

Indicator	Specifics of what to observe	How to find out
(a) Pupils have full school uniform	(i) Number of pupils with and without full school uniform	• Direct observation • Ask the class teacher • Ask the Head teacher
(b) Clean and well dressed	(i) Dressed according to school uniform (ii) Smartness (iii) Cleanliness of uniforms	• Observe pupils' general appearance • Ask teachers
(c) The Pupils have scholastic materials	(i) Learning materials owned by pupils provided by parents (ii) Other items provided by parents other than learning materials	• Check pupils' exercise books, textbooks, pens, mathematical sets provided by parents/community
(d) Feeding programmes	(i) Food provided by community (ii) Role of parents in the feeding programme	• Check store ledger • Ask pupil Head teacher/teachers • Ask parents
(e) Community initiatives for orphans and the needy	(i) Number o f orphans supported by community to study (ii) Number o f needy kids supported by community to study	• Ask Village Executive Officer • Ask Village Chairperson • Ask Head teacher • Check School Committee file

Factor: **Community Involvement**
Characteristic: **Parents send children to attend school and visit the schools regularly**

Indicator	Specific of what to observe	How to find out
(a) Regular attendance of pupils at school	(i) Number of pupils who attend school regularly in a term	• Ask class teacher • Check class attendance register • Check school attendance notice board
(b) Pupils' punctuality at school	(i) Time pupils arrive at school	• Ask teachers on duty • Ask teachers • Ask head teacher
(c) Implementation of resolutions by parents to ensure children's regular attendance	(i) Parents recommendations on file returns (ii) Actions in place to improve pupils attendance (iii) Parents involvement in implementation of attendance resolutions	• Ask Academic teacher • Ask Head teacher • Ask parent • Ask School Committee Chair
(d) Parents' visit timetable at school	i. Number of times parents visit school in a term ii. Contents of parents' visits iii) Number of letters inviting parents to talk to the class teacher of his/her or Head Teacher. iv) Number of parents who come to school when called by the Head Teacher	• Check School calendar • Check parents' visit file • Check visitors' book • Ask Head teacher • Ask teachers
(e) Parents' disciplinary records	(i) Number of disciplinary sessions held and resolutions (ii) Contents of parents' disciplinary sessions and resolutions	• Check parents' disciplinary minutes file • Ask Head teacher • Ask discipline teacher
(f) Parents' meetings resolutions	(i) Number of meetings held in 2004 and 2005 (ii) Number of resolutions made and those acted upon (iii) Contents of parents' meeting and their resolutions	• Check parents' minutes file • Ask the Head teacher • Ask parents
(g) Parents' day and parents' meeting	(ii) Availability of timetable (iii) Availability of parent file meetings (iv) Resolutions made during parents' meetings (v) Number of parents who attend	• Ask the Head master • Check file • Ask school committee

Factor: Community involvement   **Characteristic**: Parents and community provide
financial and material support

Indicator	Specific of what to observe	How to find out
(a) Parents financial and material contribution	(i) Amount contributed per parent in 2004 and 2005 (ii) Material contribution by parents e.g. exercise books, pens, labour, etc.	• Ask finance committee • Check minutes on finance Committee • Cash book • Receipts • Ask the Head teachers • Ask pupils and parents
(b) Community financial and material contributions	(i) Amount contributed in 2004 and 2005 (ii) Type of materials provided (labour, bricks, maize, sugar for the school teaching) (iii) Mechanism for safe guard of school properties	• Ask finance committee • Ask School committee chairperson • Ask Head Teachers • Ask pupils • Observe the school compound and the storage system

ANNEX 3: The Location of Singida Region

The region lies between latitude 3^0 52` $7^0$ 34` south of the Equator and longitude $33^0$and 27` 5` and 35^0 25` East of Greenwich.

LAND BOUNDARIES;
North: Arusha Region
East;   Dodoma Region
South;   Mbeya and Iringa Region
West   Tabora Region
North-West: Shinyanga

LAND AREA:
The region has a total land area of 49,341 square kilometres.
- Arable land: 11,144Sq.km.
- Grazing land: 19,747Sq.km.
- Forest and woodland: 17,750Sq.km.
- Others   500Sq.km

CLIMATE:

Rainfall:
Average annual rainfall range between 500mm.-800mm. Wet season is between November-April while dry season occurs between May-October.
Temperature:
The coldest month is July and the hottest months are October and November. Average temperature is 15^0c to 30^0c annually throughout the region.

VEGETATION
Miombo woodland (in the central plateau) and bush-land and thickets (in the southern part of the region) are the mostly common vegetation in this region. About 17,750 Sq Km. are covered by these types of vegetation. However, Patches of saline barren lands do exist.

POPULATION:-
According to Mkoa wa Singida (2005), the Region had a population of 1,086,748people (528,447, Males 558,301Females). The average household size is 3 to5 people.

ANNEX 4a: Summary of characteristics of schools correlated with PSLE Results using Yule's Q.

Characteristic	Correlation between the Pupil results and a characteristic
Motivates pupils for effective learning (MP)	1.0
The Head teacher is a role model (HR)	0.69
Has mastery of the content and methodology he/she is teaching (MC)	0.64
School infrastructure (INF)	0.64
Carries out timely assessments and evaluation of learning (TAE)	0.61
There is motivation of teaching staff, supporting staff and pupils (MSP)	0.55
There is financial and material support from other stakeholders (FMS)	0.5
He or she is a role model (RM)	0.45
Effective professional Support (PS)	0.41
There is regular and effective horizontal and vertical communication (HV)	0.39
There is effective monitoring, and supervision of school activities (MS)	0.39
School administration is capable of utilizing fund effectively.(AUF)	0.39
Enables pupils to applying knowledge and skills (KS)	0.37
Parents and community provide financial and material support (PCS)	0.33
Parents send children to attend school and visit the school regularly (PS)	0.16
The funds from the Central and Local government are timely released to schools(FCL)	0.13
There is regular and effective external supervision (ES)	0
The child is provided with basic needs by parents (BN)	- 0.36
Puts into consideration gender and individual needs and differences while teaching (GIN)	-0.37

ANNEX 4b: Pearsons Chi-square Coefficients and Levels of Significance for Characteristics of Schools and PLE Results

CHARACTERISTICS	Pearson Chi-Squared Co-efficient
Mastery of the content and Methodology MC)	0.058**
Timely Assessment and evaluation (TAE)	0.065**
Motivates pupil (MP)	0.032*
Role model (RM)	0.232
Knowledge and skills (KS)	0.543
Gender and Individual (GIN)	0.283
Horizontal and vertical communication (HVC)	0.269
Monitoring and supervision (MS)	0.046*
Head teacher Role model (HRM)	0.068**
Motivation teaching staff/pupils (MSP)	0.283
Central and Local Government funds (FCL)	0.713
Financial and material stakeholders (FMS)	0.143
Utilizing funds effectively (AUF)	0.269
External Supervision (ES)	1.000
Professional Support (PS)	0.256
Basic needs (BN)	0.543
Parents send children to school (PC)	0.690
Parents/community support (PCS)	0.409
Infrastructure	0.058**

Note

* Significant at 95% level of significance
** Significant at 90% level of significance

ANNEX 4c: Summary of Pearson Chi-Square Calculations for Characteristics of Schools Compared to Each Other.

CHARACTERISTICS	MC	TAE	MP	RM	KS	GIN	HVC	MS	HRM	MSP	FCL	FMS	AUF	ES	PS	BN	PC	PCS
Mastery of the content and Methodology MC)	MC																	
Timely Assessment and evaluation (TAE)	0.013*	TAE																
Motivates pupil (MP)			MP															
Role model (RM)		0.091		RM														
Knowledge and skills (KS)					KS													
Gender and Individual (GIN)		0.060				GIN												
Horizontal and vertical communication (HVC)	0.034*	0.050*		0.020*	0.037*	0.014*	HVC											
Monitoring and supervision (MS)					0.005*		0.001*	MS										
Head teacher Role model (HRM)	0.058	0.065		0.046*		0.032*	0.010*	0.005*	HRM									
Motivation teaching staff/pupils (MSP)										MSP								
Central and Local Government funds (FCL)											FCL							
Financial and material stakeholders (FMS)					0.088							FMS						
Utilizing funds effectively (AUF)	0.034*	0.050*					0.012*	0.001*	0.001*		0.050*		AUF					
External Supervision (ES)				0.073							0.044*			ES				
Professional Support (PS)								0.005*	0.088						PS			
Basic needs (BN)																BN		
Parents send children to school (PC)							0.091		0.001*						0.002*		PC	
Parents/community support (PCS)																		PCS
Infrastructure (IF)			0.087															

Note: Results of 0.050 or less denoted by * signify that the relationship is valid at least the 95% confidence level. That is, if the study were replicated, 95 times out of a 100 the replicated study would find a similar result.

ANNEX 5: Summary of Indicators of the Parents and Community Contribution in Cash and in Kind.

Indicator: Parents and Community Provide Financial and Material Support

SCH	PARENTS: FINANCIAL	MATERIALS (IN KIND)	COMMUNITY: FINANCIAL	MATERIALS(IN KIND)
1.	No financial contribution	Brick making sand water pen pencil, ex. Books.	No financial contribution, pad locks and watch may paid by community.	Brick making sand water.
2.	No financial (support) contribution	No material contribution ex. Books, pens pencil	No financial contribution paying watchman	Manpower bricks, stones sand.
3.	Tshs. 500/- per parent in 2005	Labour sand water (ex books, pens, pencils	600,000/- in 2005 paying watchman.	Labour stones brick making.
4.	Tshs. 2,500/-	ex books, pens, pencils	No financial contribution pad locks, watchman and store available.	Labour 6,000 bricks water, stone, sand.
5.	No financial contribution	Labour ex. Books pens and pencils	No financial contribution, watchman paid by community amount not observed.	Labour collecting building materials e.g. stones sand.
6.	No financial contribution	Labour ex. Books pens and pencils	No financial contribution, watchman paid by community amount not observed.	Labour collecting building materials e.g. stones sand.
7.	No financial contribution	No materials contributed e.g. exercise books, pens, pencil	No financial contribution, watchman hired in school.	Labour making bricks 21,000.
8.	Tshs. 3,000/- per parents	Exercise books, pens pencils, bags, mathematical set and labour.	Tshs. 5,000/- @ padlock and watchman	Labour
9.	No financial contribution	No materials contributed e.g. ex books, pens, pencil	No financial contribution, watchman hired in school.	Labour school property is kept in the store
10.	No financial contribution	No materials contributed e.g. ex books, pens, pencil	No financial contribution, watchman hired in school.	Labour charge
11.	No financial contribution	No materials contributed e.g. ex books, pens, pencil	No financial contribution, watchman hired in school.	Labour charge.
12.	Tshs. 200/- per parent in 2004/2005.	Labour charge/manpower Exercise books pens and pencils.	No financial contribution Has watchman Classes have strong doors and windows.	Labour charge.
13.	No financial contribution	No materials contributed e.g. ex books, pens, pencil	No financial contribution, watchman hired in school.	Labour charge.
14.	Tshs. 200/- per parents. In 2004/2005.	Labour charge, sand, building 2 classes, digging toilet pits.	No financial contribution Watchman Classes have strong doors	01 bags and cement, labour charge collecting

			and windows.	sand, making bricks, building classes.
15.	No financial contribution	No materials contributed e.g. ex books, pens, pencil	No financial contribution, watchman hired in school.	Labour charge.
16.	Tshs. 5,000/- per parent in 2004/2005 but few parents contributes.	Labour charge level the ground for building classes, exercises books, pens, and pencils.	Not analyzed Has watchman paid by school Classes have strong doors and windows.	Labour charge only.
17.	No financial contribution	No materials contributed e.g. ex books, pens, pencil	No financial contribution, watchman hired in school.	Labour charge.
18.	5,000 – 10,000/- @ parent	No materials contribution	No community financial contribute	Manpower no other materials contribute
19.	No contribution/financial	Exercise. Books, pens, pencils	148,500/- in 2005-11-18 Watchman	Labour charge 2,000 bricks 3 bags of sorghum
20.	No financial contribution	No materials contributed e.g. ex books, pens, pencil	No financial contribution, watchman hired in school.	Labour charge.
21.	100/- @ in feeding programme paid per month	Labour	804,400/- - June – September, 2005 10,000/- paid monthly to pay watchman	Labour
22.	200/- per parent for watchman 1,000/- @ teacher house	45 desks, pens, and pencils	35,000/- tshs paying for watchman	Bricks making
23.	No financial contribution	No materials contributed e.g. ex books, pens, pencil	No financial contribution, watchman hired in school.	Labour charge.
24.	No financial contribution	No materials contributed e.g. ex books, pens, pencil	No financial contribution, watchman hired in school.	Labour charge.
25.	No regular amount of financial contribution by parents rewarded	Labour in brick making collection of building materials, stones, sand.	No financial contribution	Manpower during building session Collecting sand store, and brick making.
26.	3,3000/- parent p.a	Labour collection stores	No financial contribution	Brick making ware, stores, sand
27.	200/- @ for watchman 500/- graduation 2,000/- teachers house	Brick making pens ex. Books	35,000/- (2004) 425,000/- (2005) 10,000/- per month watchman	Brick were made No number specified.
28.	Tshs. 199,200/-	Man power making bricks stones	300,000/- (2005) 10,000/- for watchman monthly	Bricks, stores sand
29.	No financial contribution	No materials contributed e.g. ex books, pens, pencil	No financial contribution, watchman hired in school.	Labour charge.
30.	No financial contribution	No materials contributed e.g. ex books, pens, pencil	No financial contribution, watchman hired in school.	Labour charge.

ANNEX 6: Summary of Indicators on Classrooms

SCHOOL	NO. OF CLASSROOM	NO. OF PUPILS IN SCHOOL	CLASS/PP RATIO	NO. OF PERMANENT CLASSROOMS	NO. OF TEMPORARY CLASSROOMS	DESK/PUPIS RATIO
1	7	903	1:129	7	-	1:4
2	7	604	1:86	5	2	1:3
3.	8	627	1:78	8	-	1:4
4.	7	349	1:39	4	3	1:4
5.	8	532	1:73	8	-	1:3
6.	8	490	1:61	8	-	1:4
7.	7	331	1:47	7	-	1:3
8.	6	670	1:112	6	-	1:3
9.	9	572	1:64	5	4	1:4
10.	9	572	1:64	6	4	1:4
11.	6	487	1:81	2	4	1:5
12.	10	507	1:51	10	-	1:5
13.	6	361	1:60	6	-	1:2
14.	10	824	1:82	7	3	1:11
15.	12	493	1:41	7	5	1:4
16.	16	1247	1:78	16	-	1:10
17.	12	667	1:56	10	1	1:3
18.	18	1413	1:79	18	-	1:4
19.	9	570	1:63	7	2	1:3
20.	14	1073	1:77	14	-	1:2
21.	8	665	1:83	3	5	1:5
22.	7	618	1:88	7	-	1:3
23.	10	435	1:44	8	2	1:3
24.	9	691	1:77	5	4	1:4
25.	12	1195	1:96	12	-	1:4
26.	11	649	1:59	4	7	1:4
27.	10	511	1:51	6	4	1:4
28.	11	1438	1:130	4	7	1:4
29.	7	510	1:73	-	-	1:4
30.	9	607	1:69	9	-	1:3

ANNEX 7: Summary of School Infrastructure

SCHOOL	CLASS/PUPIL RATIO	TEACHERS'HOUSES		OFFICES	STORE	TOILETS		DESK/PP RATIO
		Teachers	**Accommodated.**			**GIRLS**	**BOYS**	
1	1:129	2	2/11	2	1	8	8	1:4
2	1:86	5	2/14	2	0	3	3	1:4
3.	1:78	5	6/14	2	0	8	8	1:4
4.	1:39	2	3/8	2	1	4	4	1:4
5.	1:73	0	0	3	0	3	3	1:3
6.	1:61	0	0	3	0	4	4	1:4
7.	1:47	3	3/15	2	1	5	5	1:3
8.	1:112	2	2/13	2	0	3	3	3:3
9.	1:46	0	0	0	0	7	7	1:4
10.	1:64	1	1/7	3	0	4	4	1:4
11.	1:81	2	2/5	1	0	8	8	1:5
12.	1:51	5	6/11	3	4	5	5	1:5
13.	1:60	1	1/7	0	0	4	3	1:2
14.	1:41	1	1/16	2	0	14	14	1:5
15.	1:36	4	3/7	2	0	3	2	1:4
16.	1:36	4	4/41	2	1	27	27	1:5
17.	1:56	16	13/30	2	1	9	9	1:3
18.	1:79	0	0	3	2	9	9	1:4
19.	1:63	3	6/15	3	1	8	8	1:3
20.	1:77	5	7/25	0	0	6	11	1:2
21.	1:88	3	¾	1	0	6	6	1:5
22.	1:88	4	4/12	2	0	4	5	1:3
23.	1:44	8/	8/8	2	0	10	12	1:3
24.	1:77	6	1/12	3	1	7	7	1:4
25.	1:96	8	8/19	3	1	8	4	1:4
26.	1:49	4	6/13	2	2	4	4	1:4
27.	1:51	3	14/17	2	1	2	2	1:4
28.	1:130	8	20/20	2	0	5	5	1:4
29.	1:73	7	6/7	2	1	6	6	1:4
30.	1:67	7	9/9	2	2	12	4	1:3

ANNEX 8: Summary of pupil regular attendance per term and punctuality at school.

SCH	REGULAR ATTENDANCE OF PUPILS AT SCHOOL	PUPULS PUNCTUALITY AT SCHOOL
1.	843/903 attend in a term = 93%	Arrive at 6.45 am
2.	82% attend regularly.	6.30 am
		7.15 pm
3.	523 attend regularly per term = 83%	Arrive at 7.00am
4.	55% attend regularly per term.	Arrive at 7.00 am
5.	490/532 attend regularly per term = 92%	Arrive at 7.00 am
6.	450/579 pp attend school regularly = 78%	Pupils arrive at 6.30am
7.	292/331 attend in a term = 67%.	Arrived at 7 – 8.00 am
8.	85% - 90% attend in a term (670 pupils)	Arrive at 6.30 am
9.	325/410 attend in a term 79%	Arrive at 7.00 am
10.	450/572 pp attend school regularly per term = 79%	Arrive at 7.00 am
11.	437/451 attend regularly per term = 96%	Arrived at 6.00 am – 7.00 am
12.	428/507 attend at school regularly per term = 84%.	Arrive at 6.30 – 7.00 am
13.	276/364 attend in a term = 76%	Near school arrive at 6.45 – 7.00am
		Far from school arrive at 8.00 – 9.30 am
14.	761 attend regularly per term = 92%	Pupils arrive at 6.45 – 7.30 am
15.	370/493 attend school regularly per term = 75%	Pupils arrive at 6.00 am – 7.30 am
16	89% per term	7.00 am
17.	80% attend regularly per term	7.00am – 7.30
18.	90% - 95% attend regularly per term.	7.00am – 7.30
19	86% - 91% per term	At 6.00am – 7.00am
20.	90% attend per term	At 7.00 – 7.30
21.	80% attends per term	At 6.00am
22.	80% attends per term	At 7.15am – 1.45am
23.	83% attends per term	At 6.45 – 7.30am
24.	85% attends per term	At 6.45 – 7.30am
25.	90% per term	At 7.00 am – 7.30
26.	80% attend per term	At 6.45 – 7.30am
27.	80% attend per term	At 7.15 – 7.45
28.	85% attend per term	At 6.45 – 7.30am
29	397 per term = 78%	At 6.30am
30.	590 attends per term = 97%	At 6.45 - 7.00am

ANNEX 9: Teachers in the sample schools, number of Grade IIIA teachers and classes observed

SCHOOL	Teachers		Grade IIIA teachers in a school	Classes observed
	Total	Interviewed		Std IV and VI
1.	11	5	7	Std IV and VI
2.	14	5	6	Std IV and VI
3.	14	6	9	Std IV and VI
4.	8	4	3	Std IV and VI
5.	16	6	8	Std IV and VI
6.	12	6	5	Std IV and VI
7.	15	5	9	Std IV and VI
8.	13	5	11	Std IV and VI
9.	10	5	5	Std IV and VI
10.	7	6	5	Std IV and VI
11.	5	5	3	Std IV and VI
12.	11	8	5	Std IV and VI
13.	7	2	4	Std IV and VI
14.	16	9	9	Std IV and VI
15.	7	5	3	Std IV and VI
16	41	8	27	Std IV and VI
17.	13	5	11	Std IV and VI
18.	31	5	21	Std IV and VI
19	15	5	13	Std IV and VI
20.	25	5	17	Std IV and VI
21.	9	4	5	Std IV and VI
22.	12	5	9	Std IV and VI
23.	9	4	6	Std IV and VI
24.	12	2	8	Std IV and VI
25.	19	5	13	Std IV and VI
26.	13	2	9	Std IV and VI
27.	17	6	12	Std IV and VI
28.	20	2	16	Std IV and VI
29	7	6	4	Std IV and VI
30.	10	2	7	Std IV and VI
Total	419	148	270	60

ANNEX 10: PSLE Results for each school as Ranked by the National Examinations Council of Tanzania

School	SH	District Total schools (2003): Iramba =143, Singida (R)=130 Municipality=29 Manyoni= 73			Region: 375 schools			Completion rate	Transition rate
		2001	2002	2003	2001	2002	2003	2004	2004
HR	1	3	10	9	10	19	31	105	32.6
HR	3	117	92	86	314	260	269	85.5	7.7
HR	5	42	2	1	122	5	2	90	33
HR	7	73	90	82	212	267	261	63	15
HR	10	15	7	23	49	15	103	100	48
HR	12	75	85	101	219	248	295	72	23
HR	14	13	36	38	42	108	149	63	15
HR	16	109	111	106	300	297	303	94	9
HR	18	112	95	108	305	263	306	100	13
HR	19	45	23	34	134	69	142	86	20.6
HR	21	59	73	73	298	365	372	79	36
HR	23	17	10	4	48	37	10	84.6	48
HR	25	53	58	66	275	324	359	108	8.5
HR	27	1	3	4	1	4	3	61	48.6
HR	30	70	68	58	346	354	332	67	25.4
LR	2	9	5	8	24	9	20	85.5	7.7
LR	4	25	26	27	240	309	331	130	9.3
LR	6	5	4	6	16	21	38	72	23
LR	8	7	12	8	28	73	53	81	4.7
LR	9	22	21	20	191	188	194	100	13
LR	11	48	8	26	149	41	73	79	36
LR	13	116	111	93	331	286	207	86.7	7.8
LR	15	7	57	12	39	151	47	84.6	48
LR	17	75	101	72	211	252	159	114	29
LR	20	22	20	6	88	70	29	108	8.5
LR	22	95	110	81	257	275	184	83	14
LR	24	36	2	73	124	28	21	61	48.6
LR	26	99	107	103	273	272	227	83	14
LR	28	89	114	108	237	295	240	90	13
LR	29	53	55	45	162	147	101	68.9	15

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