

CARE Tanzania & SAWA
Advancing Girls' Access to Quality Education
in Mvomero District
(Supported by Credit Suisse)

Final Evaluation Report
By
Ophelia Mascarenhas (Dr)
(Consultant)



Dar es Salaam
2010

Acronyms

ATM	Automated Teller Machine
GER	Gross Enrolment Rate
LEADER	Learning and Advocacy for Education Rights
M&E	Monitoring and Evaluation
MEMKWA	Kiswahili for Complementary Basic Education in Tanzania (COBET)
NFE	Non Formal Education
NGO	Non-Governmental Organisation
NER	Net Enrolment Rate
PHDR	Poverty and Human Development Report
PSLE	Primary School Leaving Examinations
SAWA	Safina Women's Association
WAGE	Women and Girls Empowerment

EXECUTIVE SUMMARY

1. Background

The Project entitled “*Advancing Girls’ Access to Quality Education (AGAQE)*” aims at supporting 2100 marginalized children especially girls in four pastoralist communities of Mvomero District, namely, Kimambila, Lubungo, Kichangani/Mwenge and Mela with the focus being on the primary school in each of these communities. The goal is to support the children especially the girls in these communities to access quality primary education by (i) improving school infrastructure; (ii) enhancing the quality of teaching and learning; and (iii) promoting community ownership and engagement in education matters. The project is implemented by CARE Tanzania in partnership with the Safina Women’s Association (SAWA), a local NGO based in Morogoro, and the Mvomero District Council through its Department of Education. It has been funded by **Credit Suisse** for two years from 1st October 2008 to 1st November 2010. Before it ended, CARE commissioned an Evaluation of the Project. This report is the result of the Evaluation.

2. Objectives of the Evaluation

The primary objective of the evaluation was “*to provide implementation status indicators based on Key Performance Indicators (KPI) and Global Education Initiatives – Data + Measurements.*” The sub-objectives included the following:

1. Examine the Role of School Committees and Village Governments in promoting Maasai girls’ access to quality basic education in participating communities;
2. Conduct analyses of existing school infrastructure that support teaching and learning processes (classrooms, teachers’ houses, latrines, libraries, chairs, tables, desks, etc.);
3. Assess availability of teachers, both female and male and their professional qualifications and level of inter-active, gender sensitive teaching;
4. Collect data and evaluate status of project indicators;
5. Take stock of available text and library books at each school;
6. Review parents/community members’ perception about quality of education in the area;
7. Examine pupils’ reading ability in formal and non-formal education systems. Describe factors that might have influenced their reading ability

3. Methodology

The main methodology for the collection of data was group discussions in each of the four communities involving six types of respondents: girls, boys, male parents, female parents, members of the school committees and teachers. This was supplemented by in-depth interviews with the village leaders and head teachers, collecting data from school or village records; reading existing documentation on the Project and observations of the physical infrastructure. Wherever possible we took photographs of the respondents, school premises and surroundings.

4. Findings

The Project “Advancing Girls’ Access Quality Education in Mvomero District” had three main components which are referred to as *Objectives*. Each had sub-objectives and key indicators for the sub-objectives (see Table 1). Since the primary purpose of the Evaluation was to provide the implementation status of the Project components or Objectives, priority was given to assessing the extent to which these objectives have been met in line with sub-objectives and the indicators.

Table 1: Project Objectives and Key Indicators

Objective	Key Indicator	Progress
1. Improve School Infrastructure		
1.1 Increase enrolment <ul style="list-style-type: none"> ○ Enrolment –Stds I-VII ○ Enrolment in Pre-primary ○ Total enrolment incl. pre-primary ○ Enrolment in Standard I 	100% increase in pupils’ enrolment	(various) 22% Increase 110% Increase 29% Increase 59% Increase
1.2 Increase Pupils’ completion rate <ul style="list-style-type: none"> ○ Transition to Secondary Schools 	25% increase in completion rates (national indicator to assess progress in attainment)	64.3% for 2010; comparable data was not available from the Baseline. 106% increase compared with 2008
1.3 Construct/rehabilitate (i) Classrooms (ii) Teachers houses (iii) Libraries (iv) Water systems (v) Latrines	12 Classrooms built/rehabilitated 4 teachers’ houses; 4 libraries built 4 safe water systems established 4 latrines built	16 (114%)of the target were met -- 5 (125%) of the target of met 2 libraries (50%) of target completed 3 (75%) of the target met 3(75%) of the target met
1.4 Provide school furniture	260 desks; 68 tables; 82 chairs; 74 cupboards	100% of the target met
1.5 Provide text and supplementary books	Improve pupils’ access to text & other books	Generally the pupil to book ratio was 2:1 up to 4:1 but there were exceptions
1.6 Improve playgrounds	4 playgrounds rehabilitated	11 (275%) of the target met
2. Enhance Quality of teaching and learning		
2.1 Teacher training in learner centred methods	75% increase in use of learner centred methods	Difficult to assess this indicator since there was no baseline data to assess change

Objective	Key Indicator	Progress
2.2 Training in establishment of readership clubs	20 well functioning readership clubs	10 (50%) established
2.3 Training in promotion of readership	25% increase in pupils' reading rates	Not able to assess the increase. There was no baseline data. The Project was still waiting for the data from the Baseline Study
2.4 Training in library management	50% increase in library use	It was difficult to report on this indicator there were no records of use
2.5 Teacher training in lesson preparations	50% increase in lesson preparations	13 out of 32 teachers (40%) said that they prepared lessons. Not able to verify this since it would have required lengthy observations of teaching
2.6 Establishment of NFE centres	4 NFE centres established	11 (175%) increase
3. Promote community ownership and engagement to education		
3.1 Training school committee in book procurement	4 School Committee members trained	4 School Committee members trained
3.2 Training in school administration	4 School Committee members trained	4 School Committee members trained
3.3 Hold regular school committee meetings	Monthly meetings held	Monthly meetings held
3.4 Motivate communities to increase contributions	50% increase in contributions	50% increase in contributions

The achievements of the Sub-Objectives were measured against the situation that was found by a Baseline Study for the four villages that was commissioned by CARE Tanzania and carried out in 2009. Although the Baseline was undertaken in 2009, it provided data for 2008 as well as 2009. The data for 2008 rather than for 2009 were used because the Project started in 2008 so it was considered as the more appropriate starting point.

Objective 1: Improve school infrastructure.

This "Objective" had 6 sub-objectives which can be divided into two discrete parts which we will call 1 (a) and I (b). The first dealt with the academic performance of the students and included **Enrolment and Completion Rates**; while the other, 1 (b) dealt with the provision of physical infrastructure, services and textbooks.

(a) Enrolment:

 *The target of 100% increase (see table 1 above) was met only for pre-primary enrolment, not for total enrolment from standard I to standard VII or for total*

enrolment which included pre-primary.

- + However, there were increases in total enrolment especially for enrolment for Standard I*
- + The higher rates of increases in the earlier classes shows that the trend for sending children to school was **increasing**.*

Specifically by gender, the increase in enrolment in Standard I between 2008 and 2010 in the formal schools was: **Girls: 36%; Boys: 55%; Both Boys and Girls: 45%**. When enrolment in pre-primary was added the results were as follows: **Girls: 34 %; Boys: 25%; Total: 29%**. Girls thus did better at total enrolment which included pre-primary. the concern was the low increase in enrolment for Standard One. The lack of population data for the age group 6-8 years hindered the assessment of what proportion of the eligible children had actually been enrolled.

(b) Completion

Completion rate is defined by the Ministry of Education and Vocational Training as those who enrol in a given year and go through the system until they complete standard seven. The baseline data gave only the total figures of children who had completed standard 7. There was therefore no basis for comparison. In 2010, out of the 98 children who had registered in 2004, 63 or 64.3% of the children completed standard 7 with girls at 60% and boys at 68%. The lower figure for the girls was affected by their lower enrolment in 2004. The lower rate in both enrolment and completion for girls need to be carefully monitored. A number of constraints were identified by all the groups of respondents to explain why the completion rates which are so closely related to retention were so low, especially for girls.

© Transition to Secondary Schools

Transition to secondary schools was not an indicator in the CARE-Suisse Credit Project but nationally it is a measure of the progress of the primary education system, hence we decided to include it. *There was a definite overall improvement in the number of children going to secondary schools from 16 in 2008 to 33 in 2009, resulting in an increase of over 100%. Furthermore, there was an increase of 200% in the number of girls being selected for secondary schools.* However, the overall numbers are small with most of them coming from one school, Lubungo which also had the most number of children studying in standard 7 and overall in the school. For the other schools, the numbers were less than 10.

Objective 1b: Improve Physical Infrastructure (buildings, furniture and services) and the Provision of Textbooks and Library Materials.

Physical Infrastructure

The implementation of this component has been the most successful activity of the Project and this was unanimously acknowledged by all the respondents. Children and mothers were particularly proud of the school, the playgrounds and the sports gear. The high standard of the construction work was stated as one of contributory causes for increased enrolment in pre-primary and Standard One enrolments. The implementation was only 75% complete for water in schools and the toilets by the time of the Final Evaluation although work was in progress.

Provision of Textbooks & Library Materials

The overall finding based on the availability of books provided by the head teachers of each school was that for the majority of the subjects and classes in all the schools, the pupil/textbook ratio was between 2:1 to 4:1 with some cases where the ratio was 1:1 and in other cases where the number of books exceeded the number of pupils. However, there were some glaring examples of more than 10 pupils to one book or no books at all. For instance:.

- **Kimambila**, for English, the student/book ratio was 13:1 (2 books for 26 children) for Standard VI and 19:1 (2 books for 39 children) for Standard V. *This does not match with the data from the Project which shows that 12 books had been sent for each of these two classes and that therefore the ratio should have been 2:1 and 3:1 respectively for standards VI and V.*
- **Lubungo**: for Tehama the student/book ratio was 33:1 (2 books for 67 students) for Standard VI. Even if there were two streams of 34 students each, the ratio would be 17 students to 1 book. *This matched with the data from the Project which showed that NO books on this subject had been sent to the four schools by the Project in either the first lot or the second lot.* The ratios were higher than 10 for an additional 4 subjects including History, Geography and Civics
- **Mela**: Stadi/Kazi the student/book ratio was 17:1 for Standard VI. *This again matched with the data from the Project on their distribution of books to the schools. The records show that NO books on Stadi Kazi for Standard VI had been sent to the school.*

Nevertheless, the overall situation was better than the overall national pupils to book ratio where in many rural schools children have very few books or no books at all.

Objective 2: Enhancing the Quality of Teaching

There was a 60% increase in the number of teachers between 2008 and 2010 partly through the efforts of CARE in providing good housing near the schools, adequate textbooks, and improved school structures such as airy classrooms, as well as offices and furniture for teachers and partly through the efforts of the ward education officers in the two wards. The Project also provides some honoraria to the Non-Formal Education (NFE) Facilitators/Teachers which has a major impact on the success of this component.

Many of the teachers had been provided training in learner centred and gender sensitive teaching. *Although it was difficult to measure the impact, it was evident from the discussion with the teachers, that the teachers had become aware of learner centred training. It also appeared that the teachers were aware of and practised gender sensitive teaching because most of the boys and the girls stated that both boys and girls were treated equally in school – boys (95%); girls (90%).*

The other components of this Objective were the establishment of libraries and readership clubs and the setting up of Non Formal Education classes. For libraries, only 50% of the target had been met. The Evaluation Team was not able to see any readership club partly because of time constraints in collecting the data – the Evaluation Team was given only 4 days for field work. The Progress Report for the period ending November 2009 stated that 10 such clubs had been established.

The Non Formal Education was a major success. Not only was it fulfilling its role as providing education to older children who could not join primary one and was assisting them to pass the Standard Four qualifying test that would enable them to join standard V in the formal primary schools but *it was also doubling as adult literacy classes for young mothers*. Going by the enrolment figures, *females benefitted more than the males* from Non-Formal Education.

Objective 3: Promote Community Ownership and Engagement in Education

Members of the community were contributing towards promoting girls' and boys' access to quality education in some very substantial ways:

- ✚ Parents were paying for the costs for sending children to primary school;
- ✚ Parents were contributing cash, materials and labour for the school construction projects
- ✚ Members of the School Committee and local leaders were raising awareness of the importance of education
- ✚ Parents were participating in school meetings
- ✚ Village leaders, teachers and members of the school committees were making a follow up of absenteeism of teachers and children
- ✚ Members of the school committee, village and ward leaders and teachers were persuading parents to get children enrolled in the formal and NFE classes.

The impact of these contributions was seen in the completion of the physical infrastructure and the increasing enrolment in Primary One and the NFE classes.

Quality of Education Accessed

One of the terms of reference for the Evaluation was to test the reading ability of the children in school. Therefore in addition to the three components of the Project and their indicators, the Evaluation decided to assess the extent to which the interventions by CARE/SAWA had contributed towards access to quality education. This was done in three ways: (i) by assessing the perception of the importance of education by children and adults; (ii) testing the ability of the children to read and write and (iii) testing the competence of the children in some of the subjects that they were supposed to be taught.

(i) **On the importance of education**, the overall response was that education was very important. However, 16% of the girls found that education was "Important" (but not Very Important) while 11% of the School Committee members also found that education was important (but not Very important). Reasons for the importance of education also showed good awareness of the value of education. However, there were some responses that should raise concern. For instance, getting new skills through education was scored 2% by the boys and 3% by girls. This response seems to indicate that children's expectations were not met. Perhaps they were expecting to be taught some special skills such as vocational skills. Any future phase of the project together with the teachers should do a needs assessment of the expectations of the children to see how these can be met in school. The Situational Analysis of the CARE initiative in Kahama District also found that not all the skills that the children had were supplied by the school. .

On the question of ability to write by the children who were mostly from Standard VI, the writing was fairly good overall with a few exceptions where the words were all jumbled up with no space between the words and there were many spelling mistakes. In two instances, at

least one child in a girls' group had to be assisted to read and write. Nevertheless, the overall conclusion is that the children were able to read and write. The one child from the Non-Formal Class who was tested was also able to read fairly well.

Other tests of what the children were supposed to learn were less satisfactory. For instance, many had difficulties in making a simple statement in English such as telling us their name orally -- "My name is" much less in writing it down; in a group of 15 children in Lubungo School, only two knew the number of months in a year and no one knew the number of days for each month for all the months; in this same group most had difficulties knowing which was greater: three quarters or half. These were mostly children who would be taking the PSLE examinations this year!!.

Conclusions and Recommendations

Thus there were gains but also challenges. Academically, the main gains were in the increases in enrolment in Pre-primary and Standard One classes and in the success of the non-formal education. There was also an increase in the number of children going to secondary school. Physically there was a remarkable improvement in terms of class rooms, playgrounds, teachers' houses and in the availability of textbooks.

The challenges lie in the low numbers of children currently enrolled in the primary schools. Apart from Lubungo the numbers that complete primary education is less than 10. That surely is not reflective of the total population in those villages. There is also a challenge in improving the quality of education through less absenteeism on the part of the teachers, better teaching methods and friendly school environment. **Nearly 20% of the girls and boys stated that they did not attend school because they did not like school.** This compares with the figures for Dar es Salaam where the number of children reporting that school is "useless or interesting" was 24.3% (PHDR, 2009, p. 43). One of the reasons was the unfriendly attitude of the teachers. Finally there are fundamental constraints arising out of the socio-economic environment of the area. Two of these are access to water and food. Hunger was identified as a major constraint to attending school and performing well.

A number of recommendations have been made to address these challenges. These are summarised below.

(i) More Appropriate Data Collection is Necessary

Firstly, there is need for an annual census of children eligible to be enrolled in Pre-Primary and Primary School Classes so as to ensure not only an increase in enrolment but also that the appropriate NER is met. Secondly, there needs to be sustained monitoring of the retention rates and challenges discussed with all the key stakeholders.

(ii) Improvement of Teaching and Learning

This should be addressed at four levels: (i) Reducing the shortage of teachers; (ii) Improving teaching methods possibly through a Teachers' Resource Centre powered by solar power and with facilities that can enable teachers to use videos and computers to assist them to improve their skills; (iii) Improving the living conditions of teachers by assisting teachers to invest in solar power to enable them to use radios and even television and perhaps even have a refrigerator so that life becomes easier; (iv) Having at least one classroom or the library with

solar power so that children can use videos and other electronic equipment for self-study and group work including helping each other with literacy, numeracy and other skills.

(iii) Effective Regular Monitoring of the Quality of Teaching

There is need to put in place an effective monitoring system jointly carried out by members of the community, the district education officers and the Project staff. This will also require formulating some measurable indicators. One of these indicators has to be the level of presence in class – the opposite of Absenteeism. Among the other indicators we propose the extent to which the teaching is (i) learner centred (ii) gender sensitive (iii) encourages self learning among children; and (iv) facilities and rewards innovativeness among children.

(iii) Establishing Savings and Credit Schemes for Women to Do Business

CARE should build on its experiences in WAGE and explore the feasibility of establishing a Savings and Credit Scheme for Women. Many of the women were making mats and other handicrafts. Maasai clothes and beads is another possibility. The ability to do business will have three benefits: (i) it will provide an incentive for the girls to study so that they can get the basic skills to do business; (ii) it will increase incomes so that mothers can meet the costs for sending children to school; and (iii) it might encourage trade with the nearest urban centres.

(iv) Addressing Major Socio-Economic Constraints

Two aspects are proposed: (i) the provision of water in the schools and the communities and (ii) School meals.

CARE-SAWA and Suisse Credit have contributed substantially towards improving girls' access in the four schools in Mvomero. It is hoped that our recommendations will be considered so that the children and the communities around these schools will benefit fully from these inputs.

Advancing Girls' Access to Quality Education in Mvomero District

Report on the Evaluation Carried Out in Four Villages For CARE TANZANIA

Contents

SECTION ONE: INTRODUCTION AND METHODOLOGY

Acronyms	ii
Executive Summary	iii
Contents	viii
Acknowledgment	xii

1.0 INTRODUCTION	1
1.1 Tanzania's Policy for Gender Equality in Education	1
1.2 CARE Education Policy and Programme	2
1.3 The Project	2
1.3.1 Project Goal	2
1.4 Objectives of the Evaluation	3
1.5 Organisation of the Report	4
2.0 METHODOLOGY	5
2.1 Documentation	5
2.2 Collecting Field Data	5
2.2.1 Group Discussions	5
2.2.2 In-depth Interviews with the Village Leaders	6
2.2.3 Observations and Photographing	7
2.3 Process for Data Collection in the Field	7
2.4 Timing of the data collection	7.

SECTION TWO: THE FINDINGS

3.0 STUDY AREA	9
3.1 Overview	9
3.2 Difficulties in Getting Water Supplies	11
3.3 Main Occupations	11
3.4 Socio-Economic Conditions	11
4.0 PROGRESS IN MEETING THE THREE OBJECTIVES OF THE PROJECT 2008-2010	11
4.1 Objective I(a): Improve School Infrastructure	12
4.1.1 Sub-Component:1: Increase Enrolment and Pupils' Completion Rates	12
4.1.1.1 Enrolment	13
4.1.1.2 Completion	15
4.1.1.3 Constraints in Attending School	16
4.1.1.4 Transition to Secondary Schools	17

4.1.2 Objective 1 (b): Improve School Infrastructure: Physical Infrastructure	19
4.1.2.1 General Observations	19
4.1.2.2 Progress in meeting the targets	20
4.1.3 Objective 1 ©: Improve Infrastructure: Textbooks & Library Materials	23
4.1.3.1 Books from CARE	23
4.1.3.2 Books in the Schools	23
4.2 Objective 2: Enhancing the Quality of Teaching	25
4.2.1 Improvement in the Number of Teachers 2008-2010	25
4.2.2 Project Activities to Improve Quality of Teaching	25
4.2.3. Teacher Training & Use of Training	26
4.3.4 Library management and use	28
4.2.5 Readership Clubs	29
4.2.6 Non Formal Education Centres (NPE)/Memkwa	29
4.3 Objective 3: Promote Community Ownership & Engagement	31
4.3.1 General Observations	32
4.3.2 School Committees	32
4.3.2.1 Membership and Meetings	32
4.3.2.2 Training by the Project	34
4.3.3 Support from Parents	34
5.0 QUALITY OF EDUCATION ACCESSED	34
5.1 Awareness of the Value of Education	34
5.2 Ability to read and write	36
5.3 Skills in Other Subjects	37
5.4 Constraints to Children's Performance in School	37

SECTION THREE: CONCLUSIONS & RECOMMENDATIONS

6.0 CONCLUSIONS & RECOMMENDATIONS	39
6.1 Conclusions	39
6.1.1 Greater Awareness of the Role of Education	39
6.1.2 Good Progress in Increasing Access to Education	39
6.1.3 Excellent Progress in Improving Infrastructure	39
6.1.4 Remarkable Success in Non Formal Classes	40
6.1.5 Total Enrolment is too Low	40
6.1.6 Challenges in Access to Quality Learning and Teaching	40
6.1.7 Addressing Fundamental Socio-Economic Constraints	40
6.2 Recommendations	41
6.2.1 More Accurate Census of Children Should be Done	41
6.2.2 Monitoring of Completion Rates is Needed	41
6.2.3 Improvement of Teacher Situation and Training	41
6.2.4 Addressing Major Socio-economic Constraints	41

REFERENCES 42

APPENDICES

Appendix 1 Ratio of Children to Books by Subject & Class 43

BOX

1: Schedule for Carrying Out the Study 8
2: Changes in Attitude towards Primary Education 15
3: Need for Monitoring Transition to Secondary Schools 18
4: Pride in the Local School (Women’s Group & Primary School Mela) 20
5: Massive Improvement in the Infrastructure 22
6: Shortage of Teachers and Absenteeism Affects Quality Teaching 26
7: Enhancing the Quality of Teaching through Training 27
8: Some Ways in Which the Training has Changed Teaching 28
9: A Keen Memkwa Learner 30
10: Women Joining Memkwa Classes to Learn to Read and Write 31

Plates

Figure 1: There has been rapid expansion but... 1
Figure 2: *Environment is harsh and the labour can be an uphill struggle* 2
Figure 3: An improved school 3
Figure 4: Gender equity in schools is needed 3
Figure 5: Parents and teachers can help 3
Figure 6: Discussion Group of Women 5
Figure 7: Discussion Group of Girls 5
Figure 8: Discussion with a group of 6
Figure 9 Village Officials were around 7
Figure 10: Getting safe water is a major challenge in all seasons 9

Figure 11: Water for the school has to be hauled in jerry cans 9
Figure 12: A young mother has to balance the baby & 80 litres on her bicycle 10
Figure 13: New classrooms and office 19
Figure 14: Renovated classrooms 19
Figure 15: A pre-project school building 19

Figure 16: Inside a well-ventilated and sunny new classroom 19
Figure 17: Library with shelves and books 28

Tables

1: Composition of the Discussion Groups by Gender 6
2: Brief Characteristics of the Villages of the Study Area 10
3: Main Occupations of the Communities & Access to Mobiles 11
4: Project Objectives and Key Indicators 12
5: Progress in Enrolment, Completion and Transition to Secondary Schools 13

6: Enrolment in Std 1 2008 to 2010*	13
7: Total Enrolment in Std.1-7 and Pre-primary Classes	14
8: Completion Rates by School and in Total: 2008-2010	15
9: Constraints in Attending School	16
10: Transition to Secondary Schools	18
11: Progress in Improving Infrastructure Based on Project Reports	21
12: School Infrastructure & Services found during the Survey in 2010	21
13: Perception of Adequacy of the Physical Infrastructure by Girls & Boys	22
14: Perception of Adequacy of by Teachers & the School Committee	23
15: Perception of Adequacy of Text Books	24
16: Number of teachers in the Schools in September 2010	25
17: Promoting Activities for Enhancing the Quality of Teaching	26
18: Access to Education through Non-formal education	30
19: Implementation of Activities to Promote Community Engagement	31
20: School Committees: Membership and Meetings	32
21: Mechanisms of School Committee Support for Children's Education	33
22: Main Supporter of Children's Education	33
23: Ways in which Parents Support Their Children to Access Education	34
24: Importance of Education	35
25: Reasons Why Education is Important	35
26: Reasons for Children Not Doing Well in School	37

ACKNOWLEDGMENTS

In the first place I would like to thank Care Tanzania for giving me this opportunity to undertake this Evaluation of a project designed to enhance girls' access to quality education in four rural schools in Mvomero District in Morogoro Region. In this context I would especially like to thank Mr. Blastus Mwizarubi, Head of the Education Sector in CARE, Tanzania, for his support throughout the implementation of this Evaluation. Special thanks also to Mr. Simon Mabagala, the Project Manager of the Project "Advancing Girls' Access to Quality Education in Mvomero District" and to Ingrid Kimario, the Monitoring and Evaluation Officer for the Project who was in the field together with the consultant throughout the study.

I would also like to thank the research assistants who facilitated the discussions, namely, Upendo, the lovely Maasai university undergraduate from Tumaini University, Mahmood from the Safina Women's Association and Vicky, the experienced undergraduate from Dodoma University. Thanks also to Joachim Sayana who painstakingly collected data from the village leaders and the head teachers of the schools and assessed the quality of the furniture, teachers' houses and even the playgrounds. I would also like to express my appreciation to Mr. Gaspar Baltazary for coding the responses from the discussion groups analysing the data.

Finally, but not least I would like to thank the girls and boys, men and women, teachers and school committee members who came to the schools to meet with us and share their opinions about the issues raised with regard to access to quality education. The most encouraging aspect was their pride in their schools and their very positive attitude towards education.

To the girls in particular I would like to say a special thank you and hope that all their dreams come true.

Prof. Ophelia Mascarenhas
P.O.Box 35102,
Dar es Salaam
Telephone: 0784 391129
E-mail: mascar@udms.ac.tz
December 2010

CARE TANZANIA /SAFINA WOMEN'S ASSOCIATION

Advancing Girls' Access to Quality Education in Mvomero District Supported by Credit Suisse

Final Draft Report on the Evaluation Carried Out in Four Villages in Mvomero District, Morogoro Region

By
Ophelia Mascarenhas (Professor)
Consultant

SECTION ONE: INTRODUCTION AND METHODOLOGY

1.0 INTRODUCTION

1.1 Tanzania's Policy for Gender Equality in Education



Figure 1 There has been rapid expansion but....

The Tanzania government with support from development partners including non-governmental organisations such as CARE International has made significant efforts in ensuring gender parity at all levels of the education system through policies such as universal primary education (2000) making it mandatory for all girls and boys aged between 6-8 years to be enrolled in primary school, lowering the entry qualifications for girls to enter secondary schools, providing females special pre- university training in science to improve female enrolment in science and engineering at tertiary institutions, etc.

There have been considerable gains particularly at the primary school level following the implementation of the Primary Education Development Plan (PEDP) in 2000. As a result net enrolment in primary school went up from 59% in 2000 to 95.7% in 2009 (URT, PHDR, 2005, 2009). The Poverty and Human Development Report (PHDR) for 2009 goes on to say that "Gender parity has been consistently good" (URT, PHDR, 2009, p. 42). There have also been gains at secondary school level, with enrolment increasing from 6% in 2002 to 13% in 2004 and 27.8% in 2009 (URT, PHDR, 2007, 2009). Here gender parity is still problematic at the upper secondary levels, form III and IV.

Nevertheless, the positive gains at primary school level are not uniformly spread. The same report quoted above states that "*Children most at risk of not being enrolled or not attending*

school or completing school will include the most vulnerable children – the disabled and those living in remote areas, and children for which the opportunity cost of attending school is high” (URT, PHDR, 2009 p. 42-43). Among these most vulnerable children girls have a greater disadvantage due to cultural beliefs and gendered division of labour.

1.2 CARE Education Policy and Programme

One of the priority areas of focus for CARE, Tanzania is Education especially quality basic education as encompassed in its Education Sector Development Program. A major component of this document is Basic and Girls’ Education. CARE has been supporting enhancement of girls’ education through a number of projects in Bugarama, Kahama District, Shinyanga Region, such as the Learning and Advocacy for Education Rights (LEADER) which was initiated in 2005 and is a 10-year Project. The main aim of LEADER is *“to address the constraints to girls’ education by empowering the girls themselves and by building social and political constituencies to support equitable access to quality education and development”* (Mascarenhas, 2007). In the same locality it also supports a program known as Women and Girls Empowerment (WAGE) designed to empower women through a savings and credit scheme. Other related projects aimed at empowering girls through developing leadership skills include Power to Lead (PTLA), Innovation Through Sports (ITSPLEY) and Supporting Adolescent Girls Empowerment (SAGE). The assumption is that the women will act as a social support institution for promoting girls’ rights. It is in this context that CARE decided to undertake a project to promote girls’ access to quality education in marginalised pastoralist communities in Mvomero District, Morogoro Region focusing on the educational system but with the involvement of the community.

1.3 The Project

Project entitled “Advancing Girls’ Access to Quality Education” is located in Mvomero district, Morogoro Region, south-central Tanzania. The project is located in a difficult natural environment with very harsh weather conditions during the annual dry seasons and frequent failure of the annual rains. The communities depend very heavily on exploiting the natural resources, with the main occupation being Pastoralism. Nevertheless, they have not fully exploited the potential of the area and the poverty of the people is compounded by poor infrastructure, isolation and a degree of exclusion from mainstream development.



Figure 2: Not only is the environment harsh but the labour just to survive can be an uphill struggle

1.3.1 Project Goal

The Project, Advancing Girls’ Access to Quality Education (AGAQE), aims at supporting 2100 marginalized children especially girls in four pastoralist communities of the district: namely Kimambila, Lubongo, Kichangani/Mwenge and Mela with the focus being on the primary school in each of these communities. The four villages are located in two wards, Mzumbe and Melela wards in Mvomero District. The aim is to support the children especially the girls in these

communities to access quality primary education by improving school infrastructure; enhancing the quality of teaching and learning; and promoting community ownership and engagement in education matters. The project is implemented by CARE Tanzania in partnership with the Safina Women’s Association (SAWA), a local NGO based in Morogoro, and the Mvomero District Council through its Department of Education. The project has been generously funded by Credit Suisse for two years from 1st October 2008 to 1st November 2010 (*CARE, Scope of Work for the Evaluation, August 2010*). CARE Tanzania commissioned a Final Evaluation of the Project in October 2010, just before the end of the Project. This Report is based on the findings of the Final Evaluation.

In order to achieve its goal, the Project formulated three sets of activities which are referred to as objectives.

The three pillars of AGAQE are:

1. *Improving school infrastructure* through building and furnishing classrooms and providing textbooks and additional reading material in libraries;



Figure 3: An improved school

2. *Enhancing the quality of teaching and learning* through training teachers in learner centred and gender sensitive teaching methods;



Figure 4: Gender Equity in Access to School

3. *Promoting Community Ownership and Engagement in Education* through parent–teacher school committees and encouraging parents to contribute towards the education of their marginalised girls.



Figure 5: Parents & Teachers can greatly help

Each of the above objectives has a series of sub-activities and key indicators. These will be detailed and discussed in the sections below. The Project is nearing the end of the first stage and CARE Tanzania, as the main implementer of the Project, wanted to assess the extent to which the implementation of the Project has been in line with its planned activities. CARE also wanted to know if the interventions achieved the expected outcomes, namely improved access to quality basic (primary) education.

1.4 Objectives of the Evaluation

The Scope of Work for this evaluation outlined the main objective of the evaluation as “to provide implementation status indicators based on Key Performance Indicators (KPI) and Global Education Initiatives – Data + Measurements. The sub-objectives were as follows:

- 1 Describe pastoralist community engagement in activities aimed at advancing

girls' access to quality education and describe how cultural barriers towards girls' education have been addressed;

- 2 Examine the role of school committees and Village Government in promoting Maasai girls' access to quality basic education in participating communities;
- 3 Conduct analyses of existing school infrastructure that support teaching and learning processes (classrooms, teachers' houses, latrines, libraries, chairs, tables, desks, etc.
- 4 Assess availability of teachers, both female and male and their professional qualifications and level of inter-active, gender sensitive teaching
- 5 Collect data and evaluate status of project indicators
- 6 Take stock of available text and library books at each school
- 7 Review parents/community members' perception about quality of education in the area
- 8 Assess the potential impact of project sustainability after the project has completed its intervention
- 9 Examine pupils' reading ability in formal and non-formal education systems. Describe factors that might have influenced their reading ability

1.5 Organisation of the Report

The report is divided into the following sections.

Section one, the Introduction, provides a short background to the developments in the promotion of gender equality in Tanzania as well as the policy of CARE in promoting basic and girls' education. This is followed by a brief description of the Project in Mvomero District supported by Credit Suisse and implemented by Care Tanzania, the Safina Women's Association (SAWA) and the Department of Education of the Mvomero District Council. This section also outlines the main objectives of this Evaluation.

The next section describes the methodology used to collect the data for the study. Both quantitative and qualitative methods were used to collect data in order to meet the objectives of the Evaluation. The qualitative methods used a representative sample so as to provide some quantifiable data particularly on the perceptions of the various stakeholders of the Project: girls, boys, male and female parents, teachers and members of the school committee.

The **third section** describes the findings, beginning with the main socio-economic indicators of the villages and then proceeding to provide data and discuss the analysis of such data on the Objectives and Sub-objectives of the Project and the additional information as required by the Terms of Reference of the Evaluation, such as how the community members encourage and support girls to access education. It also has an additional section on the assessment of the quality of the education that the children in the four schools have received based on a group of children taken mainly from Standard V.

The **final section** presents conclusions and recommendations.

2.0 METHODOLOGY

Data collection involved two phases:

- (i) Going through the major documents of the Project and preliminary discussions with the Project Staff in the CARE Office in Morogoro Town;
- (ii) Field data collection in the four communities focussing on the primary school in each of the four communities but involving six types of respondents: girls, boys, male parents, female parents, members of the school committee and teachers.

2.1 Documentation

On the documentation especial effort was made to get the Baseline Report on the 4 villages/4 schools which was carried out in March 2009 and the two progress reports prepared by CARE, the first covering the period December 2008 to October 2009 and the other, November 2009 to May 2010. Other documentation was data on textbooks supplied by CARE Tanzania and data from the schools and the villages. Additional documentation was collected on the trends in education in Tanzania by going through recent reviews and reports.

2.2 Collecting Field Data

For the fieldwork several methods were used to collect the data for the study: group discussions, in-depth interviews, collecting data from school or village records; and observations of the physical infrastructure. Wherever possible the consultant took photographs of the respondents, school premises and surroundings.

2.2.1 Group Discussions

Group discussions were the main methodology used to collect the data for the report. These were held at each school with the following groups: girls, boys, male parents, female parents, members of the school committee, and teachers giving a total of 6 groups per school/village.



Figure 6 Women Discussion Group

This expansion also made it more representative of the larger number of children in Lubungo School. Again for the girls' and boys' groups the intention was to use the children from Standard VII but since they were no longer in school after taking their national Primary School Leaving

For each group the target was to get 10 persons although in some schools it was difficult to get this number and in the case of school children we had to take girls or boys from more than one class, indicating the small size of the classes in most schools except in Lubungo where the number exceeded 10 because the girls kept walking into the group discussion and we felt that we could expand to 15.



Figure 7 Girls Discussion Group

Examinations (PSLE), we opted for the next class, standard VI. In one school, Mwenge, the highest class was Standard V so again some adjustment had to be made to accommodate this difference. For each group, the discussions were conducted by a team of two persons using a prepared guide. Some of these guides were common to all groups but some questions were specific to the group, e.g. the teachers’ guide had questions with regard to the training that they had received through the Suisse Credit Project unlike the other guides.



The total number of persons that were involved in the discussion groups is **223**. In addition there were in-depth interviews with the Village Secretary or Village Chairman bringing the total interviewed to **227**. During the group discussions, a vote was taken for each response to ensure that scope was provided for people to express diverging views and for us to capture the divergence. On several occasions there was a clear difference of opinion – such as distance to school, quality of teaching by the teachers, etc. The composition of the various groups by location and

Figure 8 Discussion with a group of men

gender is shown below (see Table 1). The gender composition was affected by those who turned up for the discussion groups but mainly the composition was fairly equitable.

Table 1: Composition of the Discussion Groups by Gender

Group	Mela	Mwenge	Kimambila	Lubongo
Girls	10 F	10 F	12 F	18 F
Boys	9 M	8 M	10M	15 M
Men	12 M	10 M	11 M	9M
Women	12 F	10 F	10 F	12 F
Teachers*	4 m; 1 female	3 m; 1 female	3 m; 1 female	4m; 3 female**
School Committee	4 m; 3 female	6 m; 2 female	4 m; 3 female	3 m; 3 female
Total	26 female (47%) 29 male (53%)	23 female (46%) 27 male (55%)	26 female (48%) 28 male (52%)	36female (54%) 28 male (46%)
	Total 55	Total 50	Total 54	Total 64

* Includes the NFE Facilitators/teachers; **Lubungo has 8 regular teachers but only 4 participated in that discussion group—the rest were absent. The other 3 teachers in the group were those from the non-formal centres.

In-depth Interviews with the Village Leaders

This was undertaken by a special field assistant who was given the responsibility to get the data on the villages, find out about the village priorities and how the project fits within these

priorities. The data from the villages and the priorities are shown below (Table 4) and provide useful insights into the circumstances in which the schools operate.

2.2.3 Observations and Photographing

Mr. Joachim Sayana, the assistant assigned to get the data from the school and village records was also given the responsibility to examine the physical infrastructural inputs provided by CARE and to physically count all the furniture, assess the state of the houses and other facilities. The main consultant took some photographs of these structures and of the groups involved in the discussions.

a. Process of Data Collection in the Field

Due to the very limited time period that was allocated by the Project Management for data collection, the field work had to be restricted to one day per school/community. In order to save time discussions were held simultaneously with two groups- one coordinated by the consultant and facilitated by a field assistant, Upendo, an



undergraduate from Tumaini University who was working with CARE on a voluntary basis; the other by Vicky Sidney, a Volunteer from Dodoma University working with CARE and who was facilitated by a second field assistant, Mahmood, with Ingrid Kimario, the M&E Officer for the Project ensuring that the proceedings went well.

Figure 9 Village Officials were around.....

Another field assistant, Joachim Sayana collected data on the number of pupils per class, the teachers and their qualifications, school infrastructure, equipment such as furniture, the quality of the teachers' houses and the completion of the toilets. The Ward Education Officer was around as a representative of the District Education Department.

2.4

Timing of the data collection

The preparatory phase for the data collection involving the finalising of the Terms of Reference for the study and the collection of major documents was completed by September 20th, 2010. The second stage of the study was the field work which was carried out as per the schedule shown below (see Box 1).

Box 1: Schedule for Carrying Out the Study

September 26 : 10 am. Leave for Morogoro Town
: Afternoon meet with CARE (Mr. Simon Mabagala, Project Manager and Ms. Kimario to plan for the field trip

September 27: Morning – Consultant is introduced to the field assistants selected by CARE. This was followed by discussion of

- i) the work involved and;
- ii) going over the discussion guides

Afternoon – i) field testing of the guides for the group discussions and other outlines in Mela Primary School (children and adults)
ii) getting school data in Mela Primary School

September 28:

Morning and Afternoon: (9 am to 5 pm.)

Full data collection in Mwenge Primary School including group discussions with girls and boys from Standard V, Members of the School Committee, Male parents and Female parents and Teachers and collecting data on the school and the village.

September 29: Full data collection in Kimambila School as with Mwenge Primary School

September 30: Full data collection in Mela Village with the teams as above.

October 1: Full data collection in Lubongo Village

October 2: Return to Dar es Salaam by the Consultant and the special assistant – both from Dar es Salaam

October 4 -15 Follow up of missing data from CARE and the Schools on the textbooks for the Students.

October 18-22 : Analysis of the data and preparation of the Draft Report

October 29: Presentation of the First Draft of the Report

November/December: Finalisation of the Final Draft Report

SECTION TWO: THE FINDINGS

3.0 Study Area

3.1 An Overview

The study was carried out in 4 villages in Mvomero Ward which is located in a semi-arid environment that looked dry and inhospitable during the survey period, although we were told that during the rainy season, a number of crops including maize were cultivated. The main activities are Pastoralism and some agriculture. A brief outline of some the main features of the villages are given below (see Table 2).

The data provided in Table 2 and the few photographs illustrates the difficult socio-economic situation in the villages where the schools are located. The villages are located inland, far from the main road with no public transport to these villages which acts as a disincentive to teachers allocated to the schools especially if they do not have reasonable accommodation near the school. The most frequently seen means of transport is the bicycle but that is obviously not sufficient for such a difficult environment. A teacher who did not have accommodation at the school used a motor-cycle every day of the school year to come to school. This was obviously difficult and absenteeism among teachers was a common complaint by the parents.

Under these circumstances, it is not surprising that there is a tendency for teachers to utilise any reasonable excuse to be absent. The situation in Lubungo with 8 teachers of whom only four were present when we carried out the fieldwork there is a good example.



Figure 10 Getting safe water is a major problem in all seasons

3.2 Difficulties of Getting Water Supplies

Water for human consumption and for the livestock is a serious problem. Difficulties of getting water imposes big problem on the sanitation in schools and is a very big burden on women and children, For pastoralists it necessitates that the livestock owner migrate in search of pasture and water, in some cases affecting the attendance of young boys and even girls in school. Any improvement in schools will therefore have to be looked at in the wider context of providing better infrastructure and services by the government of Tanzania so that the children



Figure 11 Community membes bringing Water for the school in jerry cans and using a bicycle inspite of the water constraints

and their parents can get the most out of the considerable investment in the schools that CARE, SAWA and Suisse Credit have made and will probably continue to make.

Table 2: Brief Characteristics of the Villages of the Study Area

Aspects	Mela	Mkata Kichangani (Mwenge Sch)	Kimambila	Lubungo
Distance from Morogoro	42 km.	45 km.	25 km.	33 km.
Total Population	1400 (2005)	1218	678	3800 (2005)
Adult Population	Not available	M. 308; F. 461 = 769	M. 146; F. 177 = 323	M. 1229; F. 1429
Number of households	Not available	235 agric 59 pastoralists	133 agric 27 pastoralists	n.a.*
Number of children:	Not available	m. 224; f.225 total: 449	m.170; f.185 total: 355	m.428; f. 633 total 1061
Primary School	1	1	1	1
Secondary School	15 km. away-Melea	60 km. away	Mzumbe 23 km.	15 km. away
Health facility	15 km. away – Melela	Lubungo 44 km	Lubongo 44 km	1 in village
Water	Protected well	Seasonal river	1 protected well; seasonal river	Well & pump
Distance to fuel wood	Around the village	Around the village	Near village	3 km.
Shops & stands	0	5	6	16
% owning mobiles	50%	20 hh	(Many)	25%
Selling airtime vouchers	0	5	6 shops	5 shops
Charge batteries	0	2 (1 solar)	5 generators	6 persons
Crafts persons	9 women	3 basket makers	30	150 (mats)
Traditional healers	2	1	Not available	3
Traditional Birth Attendants	4	2	1	5
Small food stalls	0	2	10	5
Pombe shops	0	0	0 sell at home	2
Bicycle repair places	0	0	Own repair	3
Carpenters	0	1	5	4
Markets (daily/weekly)	0	0	Every Friday	0
5 priority village needs	(i) Secondary School (ii) Electricity (iii) Nursery school (iv) Cattle dip (v) Dispensary (vi) Market for goods and livestock (vii) Roads	(i) Water (ii) Hospital (iii) Credit for agriculture (iv) cattle dip and modern cattle (v) Tractor (vi) Roads (vii) Reliable mobile network	(i) Water (ii) Health centre (iii) Cattle dip (iv) Roads within the village (v) Market for crops and livestock (vi) Reliable mobile network (vii) Teachers' houses and classrooms	(i) Water – well is not sufficient (ii) Market (iii) Secondary School (iv) Houses for health staff (v) 2 more teachers' houses



Figure 12 A balancing ActA young mother has to balance the baby on her back and the 80 litres saddled on her bicycle

3.3 Main Occupations

As it was found in the Baseline carried out in 2009, the **main occupations** were farming and Pastoralism but there were differences among the villages as to the proportions involved in these activities. Although the villages were physically isolated from the main centres of development due mainly to poor roads and lack of public transport, the mobile phone was providing a welcome relief from isolation and the means to communicate for business, social and emergency needs (see Table 3).

Table 3: Main Occupations of the Communities & Access to Mobiles

Villages	Farming	Pastoralism	Own Mobiles
Mela	15%	85%	50% of the hh*
Mwenge/Kichangani	25%	75%	20 hh
Kimambila	30%	55%	“Many”
Lubongo	75%	25%	25% of the hh

* Number of hh. was not available

Subsidiary activities consisted of operating shops and/or stalls and crafts. The last was a fairly common activity in some villages. For instance, there were 150 persons making mats (*mikeke*) in Lubongo; 30 in Kimambila. Access to mobiles ranged from 25% to 50% of the households with the pastoralists seemingly more keen on acquiring one than the agriculturalists.

3.4 Socio-Economic Conditions

The in-depth interviews and data from the villages showed that the communities lived in difficult socio-economic conditions particularly with respect to access to basic services such as water and health facilities and economic infrastructure such as roads, markets and cattle dips. The data also showed that there was an increasing awareness of the benefits of education. At least two villages listed the need for a secondary school as one of the top 5 priorities. In Mela, the first priority was secondary school. To confirm their seriousness, they had already begun to prepare construction of a secondary school by making 10,000 bricks, enough to construct two classrooms.

However, water was a major priority in three of the four villages. Water was needed for human consumption as well as for cattle for drinking and for dips (*joshu*). Protection of cattle is a major concern among the pastoralists who depend on livestock for their livelihoods. Any future phases of the extension of the interventions to assist girls to access quality education will need to site these interventions in a way that the livelihoods of the communities are improved. The major focus of CARE will remain on improving access to education but household chores such as collecting water can affect such access. The interventions thus have to be seen in a wider context either on a Project level or through some commitment from the government as one of the partners in the strategy to improve access to quality education to children especially girls.

4.0 Progress in Implementing the Three Objectives of the Project: 2008-2010

Advancing Girls' Access Quality Education in Mvomero District had three main components which are referred to as “Objectives.” Each of these Objectives has sub-objectives with targets (See Table 4). According to the Terms of Reference, “the main objective of the

Evaluation is to provide the implementation status of the Project based on the Key Performance Indicators (KPI) and Global Education Objectives – Data and Measurement (*CARE-Scope of Work , Final Evaluation. Study, August 2010*). Therefore preference was given to assessing the extent to which the Objectives had been met in line with sub-objectives and the indicators as outlined in the Project Document and reproduced below (see Table 4)

Table 4: Project Objectives and Key Indicators

Objective	Key Indicator
1. Improve School Infrastructure	
1.3 Increase enrolment	100% increase in pupils' enrolment
1.2 Increase Pupils' completion rate	25% increase in completion rates
1.3 Construct/rehabilitate classrooms, teachers' houses; libraries, latrines and water systems	12 Classrooms built/rehabilitated 4 teachers' houses; 4 libraries built 4 safe water systems established
1.4 Provide school furniture	260 desks; 68 tables; 82 chairs; 74 cupboards
1.5 Provide text and supplementary books	Improve pupils' access to text & other books
1.6 Improve playgrounds	4 playgrounds rehabilitated
2. Enhance Quality of teaching and learning	
2.1 Teacher training in learner centred methods	75% increase in use of learner centred methods
2.2 Training in establishment of readership clubs	20 well functioning readership clubs
2.3 Training in promotion of readership	25% increase in pupils' reading rates
2.4 Training in library management	50% increase in library use
2.5 Teacher training in lesson preparations	50% increase in lesson preparations
2.6 Establishment of NFE centres	4 NFE centres established
3. Promote community ownership and engagement to education	
3.1 Training school committee in book procurement	4 School Committee members trained
3.2 Training in school administration	4 School Committee members trained
3.3 Hold regular school committee meetings	Monthly meetings held
3.4 Motivate communities to increase contributions	50% increase in contributions

The achievements of the Sub-Objectives were measured against the situation that was found by a Baseline Study for the four villages that was commissioned by CARE Tanzania and carried out in 2009 (Development . Although the Baseline was undertaken in 2009, it provided data for 2008 as well as 2009. The data for 2008 rather than for 2009 were used because the Project started in 2008 so it was considered as the more appropriate starting point.

4.1 Objective 1: Improve School Infrastructure:

This objective had three discrete sub-components: (i) the academic status and performance of the children in schools using enrolment and completion as indicators; (ii) the construction/rehabilitation of the physical structures and services; and (iii) the provision of learning materials and training for teachers.

4.1.1 Sub-component 1a: Increase Enrolment and Pupils' Completion Rates

The first sub-component relating to the academic status of the children in school focussed on their enrolment in the school and the subsequent retention and completion. No statistical data

was collected on the actual performance of the children in class or the examinations. This was also not required by the Project Proposal although it might be worth considering for any future phase of the Project. We considered three indicators for this sub-component: two which were stipulated by the Project Proposal and one which we think is indicative if children are really getting the academic information that they are entitled to get. The two CARE indicators are:

- 100% increase in pupils' enrolment;
- 25% increase in completion rates

To these we added a third:

- Increase in transition to secondary schools. (no specific target).

The progress is shown below (see Table 5)

Table 5: Overall Progress in Enrolment, Completion and Transition to Secondary Schools

Indicators	Target	Baseline 2008 (number)	Survey 2010 (number)	Increase %
Enrolment* Stds I to VII	No target set	638	833	31%
Enrolment in pre-primary	No target set	62	130	110%*
Total Enrolment incl. pre-primary	100% increase	744	963	29%
Enrolment Rate in Std I	100% increase	121	192	59%
Completion rates	25% increase	59	63	64.3% for 2010; comparable data not available for 2008
Transition to Secondary Schools	Not targeted in the Project	20	29	45% increase

* Over 100% increase;

4.1.1.1 Enrolment

Firstly, for better understanding of the impact of the Project, enrolment was divided into two categories: the total number of girls and boys in Pre-primary and Standards One to Seven in the primary schools without regard to their age and those entering Standard I for the first time. This was discussed with CARE at the start of the fieldwork and it was agreed that we measure both types of "enrolment." The breakdown by gender for Standard I and for all the Standards, One to Seven is shown below (see Tables 6-7).

Table 6: Enrolment in Std 1 2008 to 2010*

School	2008		2009		2009	2010		2010	2008
	Girls	Boys	Girls	Boys	All	Girls	Boys	All	All
Lubungo	38	29	31	29	60	29	34	63	67
Kimambila	0	6	1	10	11	14	7	21	6
Mwenge	4	7	11	10	21	23	24	47	11
Mela	27	21	24	20	44	28	33	61	48
All schools	69	63	67	69	136	94	98	192	132

*Figures for 2008 and 2009 were taken from the Baseline Report, August 2009

The increase in enrolment in Standard I between 2008 and 2010 in the formal schools was

Girls: 36%

Boys: 55%

All : 45%

Although the enrolment did not meet the 100% target, the overall increase of 45% enrolment in Standard One is commendable and therefore the Project can be said to have been successful in achieving a significant increase in a new intake in Primary Schools overall and in three out of four schools between 2008 and 2010. Moreover, there was a high degree of gender parity in the enrolment in 2010 with 94 girls being enrolled compared with 98 boys.

Nevertheless the lower rate in increase in enrolment for girls between 2008 and 2010 is a matter of concern especially since the target of this Project is girls' access to education. Were there more boys than girls in that age group during 2008 to 2010? Unfortunately we could not compare this with the population statistics for the age group of 6-8 years to assess the proportion of eligible children who were enrolled in Standard One during the three years, 2008, 2009 and 2010. The last population census was for 2002 and the villages were not able to give us the statistics for children aged 6-8; their records divided children into 0-5 years and 6-15 or even 6-20 years.

Any future phases of the project should include an annual census of children in this age group in order to show the proportion enrolled as compared with the total number of children who were eligible to be registered for Standard I.

Total Enrolment: in standards I to VII had also increased between 2008 and 2010 (see Table 7).

Table 7: Total Enrolment in Std.1-7 and Pre-primary Classes

School	2008		2009		2009	2010		2010	2008
	Girls	Boys	Girls	Boys		All	Girls		
Lubungo	190	206	190	202	392	192	203	395	396
Kimambila	61	59	55	59	114	83	60	143	120
Mwenge	23	21	32	31	63	50	52	102	44
Mela	71	51	91	66	157	107	86	193	122
Total Stds 1-7	345	337	368	358	726	432	401	833	682
Total Pre-primary	31	31	12	25	37	72	58	130	62
Total	376	368	348	352	700	504	459	963	744

The increases between 2008 and 2010 were as follows:

Girls: 34 %

Boys: 25%

Total: 29%

Increase in total enrolment in the schools was also below the targeted 100% and much lower than enrolment in Standard I. Nevertheless, nearly 30% increase is an achievement as compared with the national figures which have shown a downward trend during 2008 and 2009 (URT, PHDR, 2009, p. 42). There were more girls in school than boys, a consistent pattern between 2008 and 2010.

The higher rates of increase for Pre-Primary and Standard I compared to total enrolment show that there is an increasing awareness about the need to enrol children in schools among the parents and an increasing willingness among children to come to school as a result of the Project. The higher rate of enrolment in Standard One may also be due to the sense of pride in the school that has been created by the improved physical appearance of the schools and better access to desks and other infrastructure including the playgrounds. The parents therefore have decided to

send their children to the local school rather than to a distant school. This was confirmed by the village leaders in Lubongo (see Box 2 translated from Kiswahili)

Box 2: Changes in Attitude towards Primary Education

- ✚ Children have been motivated by seeing that the appearance of the school has changed and become beautiful and therefore are willing to attend school;
- ✚ Agriculturalists and pastoralists now work together better than before to improve the school facilities;
- ✚ Pastoralists are beginning to change (their cultural habits that prevented children from attending school) after CARE initiated the Project;
- ✚ All community members have been motivated to participate in the project and implement activities related to the project.

To sum up:

- ✚ *The target of 100% increase was met only for pre-primary enrolment.*
- ✚ *However, there were increases in all categories of enrolment especially for Standard I*
- ✚ *The greater increase in the earlier classes shows that the trend for sending children to school is **increasing**.*

4.1.1.2 Completion

Completion was defined as those who started in Standard One and were able to complete Standard Seven in the primary school. The results are shown below (see Table 8).

**Table 8: Total Number of Students who Completed Standard 7: 2008-2010
(in number of students)**

Schools	2008			2009			2010		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Mela	---	--	--	5	4	9	8	9	17
Mwenge*	n.a.	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Kimambila	4	5	9	7	9	16	1	3	4
Lubongo	26	24	50	36	28	64	27	15	42
Total	30	29	59	48	41	89	36	27	63

*Mwenge did not have classes higher than Standard V.

Completion rate is calculated as those who had enrolled in Standard One and continued with their primary education until they completed Standard Seven. This data was only available for 2010. To calculate the completion rate for 2010, one would have to look at the enrolment in Standard I for 2004. It showed that 45 girls and 53 boys enrolled in Standard I in 2004 giving a total of 98. Of these, 27 girls and 36 boys or a total of 63 pupils completed Standard Seven as shown in Table 8 above. This gives completion rates as follows:

Girls: 60%

Boys: 68%

Overall: 64.3%

Unfortunately we could not find comparable figures for earlier years so it was difficult to calculate change between 2008 and 2010.

A closer examination of the results by school showed that the difference was caused mainly by Lubongo school in which the students far outnumbered those in the rest of the schools. Girls

outnumbered boys in Mela and Kimambila but these numbers were very low being less than 10 compared with Lubungo where the numbers were between 20 and 30. The overall low numbers shows that the challenge here might be retention of girls in the upper primary classes. For instance in Mela, the numbers were 33 and 28 for boys and girls respectively for Standard I compared with 8 and 9 respectively who completed Standard VII. It may be that girls opted out of school after a certain age. On the other hand it might even be that very few had enrolled in Standard I in the past and hence the low numbers of girls and boys who completed primary school. The impact of the increased rates of enrolment can only be assessed in the years to come.

In conclusion:

- ✚ *The data on completion is complex. The schools need to keep better records in the future to enable the Project staff to better monitor the completion rates. For the future those who registered in 2005 and beyond will be required in order to get a better understanding of the completion rates. .*
- ✚ *Also the Project needs to pay more attention to retention and completion especially by girls in any future extension of the Project. Why are the numbers of those who completed Standard 7 so low in Mela and Kimambila? Why were 35 students in Lubungo not able to continue with primary education after Standard 4? What can the Project do to increase the total number of girls and boys who complete Standard Seven?*
- ✚ *There is also need to agree on a common definition of “Completion.” The schools tend to just provide statistics on how many completed Standard – this is different from “Completion Rates” which are based on the enrolment in Standard 6 years earlier*

4.1.1.3 Constraints in Attending School

An attempt was made to assess possible factors that may affect the retention and completion rates by examining the constraints in attending school. The analysis of the constraints which were identified by all the groups is given below (see Table 9).

Table 9: Constraints in Attending School

Reasons	Girls	Boys	Men	Women	Teachers	Sch. Committee Members
1. Household chores	3.7%	5.5%	---	--	7.7%	
2. Children do not like school	7.4%	17.6%	10%	9.3%	7.7%	7.9%
3. Poverty	6.1%	10.1%	5.6%	2.3%	7.7%	5.3%
4. Household violence	--	3.5%	--	--	---	
5. Children doing business	4.9%	10.6%	3.8%	9.3%	---	
6. Drug abuse	--	9%	---	--	---	
7. Illness	11%	22.1%	7.5%	33.3%	7.7%	25%
8. Absenteeism (pupils)	7.4%	9%	---	--		
9. Herding cattle	10.4%	7.0%	6.3%	3.9%	17.3%	3.9%
10. Early marriage	14.7%	5.0%	10.0	--	13.5%	9.2%
11. Parents' negligence	12.9%	0.5%	23.1%	23.3%	---	14.5%
12. Pregnancies	7.4%		6.3%	--	---	
13. Distance to school	14.1%	-----	8.1%	--	7.7%	9.2%
14. Fathers' irresponsibility	-----	-----	5.6%	--		
15. Hunger	----	----	6.3%	9.3%		
16. Teachers absenteeism	----	----	7.5%	1.6%		25%
17. Poor parent-teacher relations				7.8%		
18. Migration of parents	----	---	---		30.8%	

The above analysis showed a number of important issues.

- ✚ There is a wide range of constraints that prevent girls' and boys' full access to primary school;
- ✚ Four issues were mentioned by all groups:
 - ✓ Children not liking school
 - ✓ Poverty, although the dislike of school scored higher than poverty.
 - ✓ Illness (understandably scored the highest)
 - ✓ Herding cattle (mentioned even by girls)
- ✚ Early marriages was mentioned by 5 out of the 6 groups, the notable exception was women;
- ✚ Distance to school was mentioned by four out of the six groups. In a related question 50% of the teachers in Mela graded distance to school as "bad". Among other groups it was graded as bad by 15-20% of the respondents. Distances are especially hard on small children. In one village very young children could not attend the pre-primary school because of the distance to the school. It was considering having classes within the village.
- ✚ Cultural practices such as herding cattle and early marriages are still prevalent although it was stated that the practice is declining. The decline was mentioned by both the teachers and the women but obviously they were still being practiced.
- ✚ Future phases may wish to consider greater attention being paid to raising awareness of the negative consequences of such practise on the access of girls and boys to quality education.
- ✚ A great deal has been achieved in raising awareness among the communities to get their children enrolled in pre-primary and standard one; the major problem now may well be retention.

There were many similarities and differences between the constraints stated in 2009 during the Baseline Study and in 2010.

In the first place **pregnancies did not seem such a constraint** as in 2009 where it was stated as "*the single most important factor that the community held responsible for limiting girls' access to education was adolescent pregnancies (76% of the respondents) (Baseline Report, p.27)*". It is true that in the Baseline the question was focused on girls' access to education while in this report the question was more general. Nevertheless, the decline in importance to pregnancies by all groups appears to show that the incidence of adolescent pregnancies may be dropping. Firstly it was only mentioned by girls and male parents but in both cases, the response was less than 10%. On the other hand some major constraints remain unchanged.

At the more general level, **illness scored the highest in both surveys**. Other similarities were "doing business," "household chores" and "herding cattle." It is apparent that while there is increasing change in the attitude towards enrolment, there are still cultural practices and gender division of labour that affect children attending school regularly. In any future phases of the Project attention should now focus on retention and completion.

4.1.1.4 Transition to Secondary Schools

Transition to secondary schools was not an indicator in the CARE-Suisse Credit Project but nationally it is a measure of the progress of the primary education system, hence we decided to include it here.

The results were not out yet for 2010 so the comparison had to be made with those selected in 2009 (see Table 10). The largest number of students came from Lubungo with its higher total enrolment overall, but there was some progress in Mela (9) and Kimambila (4) compared with 2008. However, in both schools there were fewer girls being selected than boys. Nationally, girls do less well than boys in the PSLE and so it is not surprising that there were fewer girls. The results in Lubungo therefore are an exception and worth investigating. Mwenge is a new school with the highest class in 2010 being Std. V.

In conclusion:

There was a definite overall improvement in the number of children going to secondary schools from 16 in 2008 to 33 in 2009, resulting in an increase of over 100% (see Table 10). However girls were doing less well than boys except in Lubungo where there was an increase of 200% in the number of girls being selected for secondary schools.

Table 10: Transition to Secondary Schools

Schools	2008			2009		
	Boys	Girls	Total	Boys	Girls	Total
Mela	---	--	--	5	4	9
Mwenge*	n.a.	n.a	n.a	n.a	n.a	n.a
Kimambila	-	-	-	3	1	4
Lubungo	11	5	16	9	11	20
Total	11	5	16	17	16	33

*highest class is Standard V.

However, in a discussion over this commendable progress with the ward education officer, we were told that in most cases the children selected from the 4 schools to proceed to secondary schools were not facilitated by their parents. He felt that there were cultural issues behind this denial of the children to access secondary education.

When we raised this issue in a women's group it was hotly denied. Some stated that it was financial constraint that prevented the parents from enabling their children to go to secondary schools. Others stated that ward secondary school was far away and this was particularly hard on the younger children and on the girls. The latter were particularly vulnerable to being abused on the way to and from school or in temporary accommodations near the school. These reasons are real. Distances to secondary schools ranged from 15 km. to 60 km. which is too far for a daily commute especially for girls. It is for this reason that at least two villages wanted a secondary school in their village (see Table 1). There is need for monitoring transition to secondary schools for many reasons (see Box 3)

Box 3: Need for Monitoring Transition to Secondary Schools

- ✚ Between 2008 and 2010 the number of girls selected for secondary school increased by 200% ;
- ✚ However those selected were not facilitated to proceed to these schools or to remain there
- ✚ Reasons given were poverty and distance to secondary schools
- ✚ Mothers denied that cultural aspects such as early marriages were the major reason for the girls not being able to access secondary education.
- ✚ Further work is necessary as to the real reasons why those selected for

secondary schools do not proceed to secondary schools.
✚ Monitoring transition to secondary schools should included in any future phase of this project because it affects the rights of children especially girls to quality education.

**1.2 Objective 1b: Improve School Infrastructure:
Sub-component: Physical Infrastructure**

4.1.2.1 General Observations

A major part of the Project and one that got the greatest amount of praise and appreciation from all the respondents was the vast improvement in the physical infrastructure especially the classrooms. The contrast between the old and the new or even the rehabilitated structures are best seen below (See Figures 13-16)



Figure 13: New classrooms and office



Figure 14: Renovated classrooms



Figure 15: A pre- project A school building

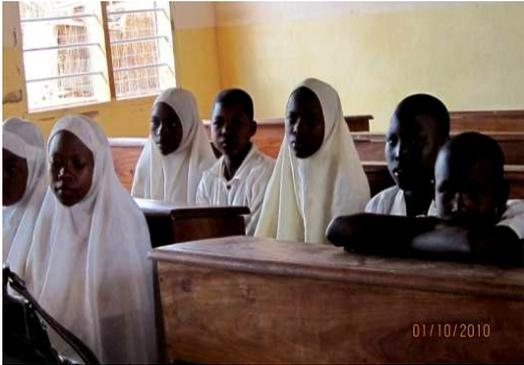


Figure 16: Inside a well-ventilated and Sunny classroom

All groups were asked as to the changes that had taken place in their school. What was impressive was that everyone that we talked to was aware of the changes that had taken place in their schools. For the adults and the students the first question that was asked was about the changes that had taken place in their village in the last two years. That was usually answered very slowly and with great prompting from the facilitators. However, the next question was about changes in their village school – no prompting was required here. The list exceeded the space provided for in the discussion guide. All the groups – children, parents, teachers and school committee members were unanimous in the tremendous changes that had taken place in

their schools due to the support from CARE. To the women for instance, it was not only the good walls but also the fact that the classrooms had doors that could be shut, windows with frames and a good roof.

The awareness of the changes and the pride in their new school is best encapsulated in the following quotation of the women from the women in Mela (see Box 4).

Box 4: Pride in the Local School (Women’s Group on the Primary School in Mela)

“Nowadays there are few children on the road. It is the best school in the ward and even the surrounding ward. Last year all 9 children who sat for the Primary School Leaving Certificate examinations passed and were selected to enter secondary schools. In the past before CARE came to improve our school, classes were held in the Church which has a very poor structure and which was looked down upon; now people even from surrounding villages want to send their children to this school.”...” The very positive increase in enrolment has necessitated having 2 streams of Standard I”
Women’s Group in Mela Primary School. (Total enrolment in 2010 was 61 which would necessitate sub-division into 2 streams since the regulation states that the ideal class should have 45 students maximum).

The awareness of the changes and the pride that they felt in having a modern school was also brought about by the fact that they participated in the improvement of the physical structures.

- ✚ CARE gets an A+ for involving the community in the improvements to the school infrastructure.
- ✚ Part of the pride of the adults in their schools was the fact that they had shared in the improvements by providing labour and other inputs during the completion of the construction. They also took pride in the fact that the construction of some of the “new” classrooms had started before CARE came in – CARE facilitated the completion.
- ✚ The school was obviously theirs.
- ✚ The village leader of Lubungo felt that participation in the CARE infrastructure improvements had united the agriculturalists and the livestock keepers. “Wafugaji na wakulima sasa wanashirikiana zaidi hasa baada ya mradi kuja” (the livestock keepers and the farmers now cooperate more than before the project came in).
- ✚ The consultant has been to many places in Tanzania where the development partner jointly with the local communities had built a school or a health facility or a water system and where the communities found all types of excuses to avoid the harambee (self-help) type of participation in the construction or did not even come out in large numbers during the handing over.
- ✚ It was therefore very heartening to hear the children, women and men talk about “our school!” in such glowing terms.

4.1.2.2 Progress in meeting the targets

The progress in the implementation of the physical infrastructure and the extent to which the Key Project Indicators (KPI) were met are shown below (see Table 11). There were some differences between those reported by the adults and the children and those reported by CARE. There was also some confusion on the interpretation of the teachers’ houses. If a building is 2 houses in 1 then those should be counted as 2 houses. That is the interpretation that we have used. Some of the targets seemed unnecessarily high such as 68 tables and 82 chairs for teachers – surely that is unnecessary for 4 primary schools with an ideal maximum staff of 9 teachers per school? It appears that the targets were changed but they were still being used in the two progress reports that were made available to us and in the Baseline Study.

Generally, according to the Progress Reports, the targets for 50% of the items were met or exceeded by the time of the present study while the others were nearly there (see Table 11). The exceptions were latrines, the water system and the libraries where the work was still on-going. Some activities and inputs had exceeded the targets (see Table 11). This objective also included the provision of textbooks but this will be treated separately.

Table 11: Progress in Improving School Infrastructure and Services Based on the Project Reports

Indicators	Target	September 2010	% of Target
1. Classrooms/renovation or newly constructed	14	16 done	114%**
2. Teachers' Houses	4	10 houses completed in 5 buildings	125% ** using Care def. of houses
3. Water systems for schools The water system for Kimambila was in the community nearby	4	3: Mela & Kimambila, Mwenge	75%
4. Latrines Each had 4 holes for girls and 4 for boys	4	3, Lubungo, Mwenge and Kimambila	75%
5. Playgrounds	4	11 renovated	275%**
6. Libraries	4	2 in Mela and Lubungo	50%
7. Desks	260	260	100%**
8. Tables (target changed to 33?)	68	25 supplied	76%
9. Cupboards/Bookshelves	8	8	100%**
10. Chairs (target changed to 33?)	82	25 chairs	76%

** Target met or exceeded

The implementation of this component has been the most successful activity of the Project and this was unanimously acknowledged by all the respondents. Children were particularly proud of the school, the playgrounds and the sports gear. However, there were reservations about access to water and toilets because even the completed toilets could not be used due to lack of easily accessible water in the schools. The situation in 2010 is compared with the situation in the four schools as found in the Baseline in 2009 (see Table 12)..

Table 12: Situation of School Infrastructure and Services as Found by the Survey in 2010
(Based on Information from the Head Teacher and Observations)

Infrastructure /Amenities	Mela	Mwenge	Kimambila	Lubungo	Total in 2010	Baseline Total in 2009	Diff. 2009-2010
Desks	94 (33)	65 (0)	80 (33)	139 (87)	378**	153	225
Tables	9 (2)	4 (0)	5 (1)	8 (8)	26**	11	15
Chairs	10 (2)	4 (0)	8 (2)	14 (10)	36**	14	22
Classrooms	7 (3)	3 (0)	4 (2)	6 (3)	20	8	12
Teachers' Houses	4 (2)	1 (0)	2 (1)	4 (3)	11	6	5
Latrines for girls*	3 (3)	4 (1)	4 (1)	4(2)	15	7	8
Latrines for boys *	2 (2)	4 (1)	4 (1)	4 (2)	14	6	8
Water in School	1	--	----	--	1	None	1
Playground	3 (3)	2 (0)	4 (0)	6 (2)	15	5	10

** Only those in good condition were considered which might explain the discrepancy between the Project Reports and the situation on the ground

*Only 3 latrines each of 3 holes for girls and 2 for boys were completed by CARE

Box 5: Massive Improvement in the Infrastructure

- ✚ The scale of improvement was large.
- ✚ For the desks, the addition was 147%;
- ✚ For playgrounds the increase was 200%;
- ✚ For latrines the change was 100% even at the 50% achievement of the target by the Project
- ✚ Teachers houses – if one counts the 2 in 1 as two houses, the increase is 10 houses or 170%
- ✚ What was also impressive was the standard of the construction which was so different from the previous thatch covered mud and poles structures (see inset figure)



Generally, the findings from the Survey for the Final Evaluation tallied with those in the Progress. There were, however, some anomalies. For instance, if there were 153 desks in 2009 and CARE supplied 260, then the total in 2010 should have been about 410. Differences in the furniture may be due to the fact that we counted only those in good condition. Project staff explained that some of the chairs reported by the Baseline may have included those already supplied by CARE before the Baseline was carried out. This may explain some of the differences but *a periodic verification to be included in each progress report is recommended to ensure that the equipment supplied by CARE is maintained.*

All the respondents were also asked about their perception of the adequacy of the improved infrastructure. The results are summarised below for students, teachers and members of the school committee (see Tables 13 and 14).

Table 13: Perception of Adequacy of the Physical Infrastructure by Girls and Boys

Infrastructure	Boys (n=52)				Girls (n=40)			
	Poor	Average	Good	V. Good	Poor	Average	Good	V.Gd
Enough classrooms	1.9%	53.8%	34.6%	9.6%	2.5%	57.5%	40	--
Enough desks	--	48.1%	30.8%	21.2%	--	30%	20%	50%
Water in school	--	34.6%	19.2%	46.2%	65%	22.5%	12.5%	--
Playgrounds	--	--	23.1%	76.9%	17.5%	77.5%	5%	--
Sports gear	--	--	19.2%	80.8%	47.6%	35.7%	14.3%	2.4%
Clean toilets	38.5%	57.7%	3.8%	----	50%	47.5%	2.5%	--

Observations

- ✚ Classrooms and desks scored nearly 98% satisfaction as average, good or very good which was reflective of the perspective of the respondents about the main changes in the school;
- ✚ Playgrounds scored 100% for boys as good or very good; but girls had reservations and

nearly 20% found the situation less than average.

- ✚ Nearly half the girls found the sports equipment such as foot- and net- balls, nets for the goals, etc. as not adequate. We were aware that the Project had supplied many foot and net balls, nets for the goals, etc. so it was a surprise that nearly 50% found the sports equipment inadequate. When questioned about the low score, we were told that more attention was paid to football and netball and not to some other games that the girls would have liked to play but there was no room on the playgrounds for such games since the grounds were earmarked for the ball games. These are perceptions of the girls and there may be fundamental causes as to why the equipment. It might be worthwhile for the Project staff to discuss the matter with the girls and see if the dissatisfaction can be resolved.
- ✚ Nearly two-thirds of the girls found the water situation to be poor. That is surprising in view of the fact that three schools had a water supply system. The Project staff need to talk with the girls and find out why the provision scored so low among them. The Evaluation Team used a voting system during the group discussions and this vote count was repeated twice to assess accuracy.
- ✚ About half the girls found the situation regarding the toilets unsatisfactory mainly because they had no easy access to water for the toilets. The Leader of the Evaluation Team had an occasion to use the new school toilets and found that there was no water in the toilets. This was also found by one of the research assistants. When this assistant (a fellow Masai) asked the girls as to why they found the toilets unsatisfactory, she found that the dissatisfaction was linked to the lack of water in the toilets.

✚ *These two aspects: adequate water on the school grounds (as opposed to water in the nearby village or nearby other location) and water in the toilets in all the school should be a focus of any new phase of the Project*

Table 14: Perception of Adequacy of the Physical Infrastructure by Teachers and the School Committee

Infrastructure	Teachers (n=52)				School Committee Members			
	Poor	Average	Good	V. Good	Poor	Average	Good	V.Gd
Enough classrooms	2%	55%	25%	18%	1.8%	52.6%	42.1%	3.5%
Enough desks	2%	35%	25%	38%	3.6%	14.3%	39.3%	42.9%
Water in school	45%	55%	----	-----	28.6%	28.6%	14.3	28.6%
Playgrounds	-----	-----	25%	75%	---	21.4%	57.1%	21.4%
Sports gear	---	----	25%	75%	---	17.9%	75%	7.1%
Clean toilets	25%	75%	----	-----	25%	7.1%	53.6%	14.3%

The best items in terms of adequacy were classrooms, desks and playgrounds. There were again some reservations about the supply of water to the school. Only one school had a well within the school, while another had a well in the village about 1 Km from the school. While appreciating that there might be technical problems of getting water within the school grounds some balance has to be struck to ensure that the water system is as close to the school as possible. The head teachers of nearly every school also identified some gaps including the supply of water close by. The conclusion is that while there was great appreciation of the inputs of CARE there were still some gaps to be filled with the assistance of CARE and or the government. Nevertheless, the overall opinion was that a great deal had been delivered by CARE.

4.1.3. Objective 1c: Improve School Infrastructure:

Sub-component: Provision of Textbooks & Library Materials

One of the sub-components of this Objective 1 is the provision of text and supplementary reading materials including reference books. Data was collected from two sources: CARE and the schools themselves.

4.1.3.1 Books from CARE

The Project staff at CARE informed us that they had delivered text books in two phases. In the Annual Report covering the period December 2008 to October 2009, stated that “All four schools received a total of 1,066 textbooks allowing each student to have his/her own textbook” (p.3). The Second Progress Report covering November 2009-May 2010 reported that an additional 2209 textbooks bringing the total to 3275 textbooks in all. It concluded that: “With this supply of 3275 textbooks in total, schools will experience the improvement in teaching and learning because two books will be available for a pupil (2:1)”. This indicates a misunderstanding about the pupil/textbook ratio. A better measure is to calculate the ratio for each subject taught otherwise one could have 2 children to a book in one subject and none in the other and call this a 2:1 ratio of textbooks. That gives a wrong impression. Access to quality education depends on the availability of a ratio of 2 children to one book in ALL the subjects.

4.1.3.2 Books in the Schools

In some of the discussion groups with the pupils, it was stated that some classes had just one text book for the entire class – in this case 16 children in Standard VI. Some attempt was therefore made to work out the student/ book ratio based on information provided by the school head teacher (*see Table A1 in Appendix I*). The overall finding was that for the majority of the subjects and classes in all the schools, the ratio was between 2:1 to 4:1 with some cases where the ratio was 1:1 and in some cases where the number of books exceeded the number of pupils. However, there were some glaring examples of more than 10 pupils to one book and no books at all. To quote some examples:

- **Mwenge had no books at all for mathematics** (*This did not match with the books that had been sent by the Project which totalled 55 books for standards I to VII (17 in the first lot; 38 in the second according to the lists provided to the Consultant Evaluator.*)
- There were several other examples.
 - **Kimambila**, for English, the student/book ratio was 13:1 (2 books for 26 children) for Standard VI and 19:1 (2 books for 39 children) for Standard V. *This does not match with the data from the Project which shows that 12 books had been sent for each of these two classes and that therefore the ratio should have been 2:1 and 3:1 respectively for standards VI and V. The Project needs to do a follow up on the discrepancies.*
 - **Lubungo**: for Tehama the student/book ratio was 33:1 (2 books for 67 students) for Standard VI. Even if there were two streams of 34 students each, the ratio would be 17 students to 1 book. The ratios were higher than 10 for an additional 4 subjects including History, Geography and Civics. (Here the data matched the supply of the Project – CARE had NOT supplied any books on this subject for Standard VI according to their lists of supply).
 - **Mela**: Stadi/Kazi the student/book ratio was 17:1 for Standard VI. (Here too the data from the school matched the data from the Project – CARE had not supplied any textbooks for this subject for this class). *One of the reasons maybe that the subjects are being phased out. If that is the case then there is a good reason for*

no books being sent on these topics even though they were listed in the subjects that are being taught by the school.

Nevertheless, the overall situation is a vast improvement on the past and compares favourably with the overall national ratio of 3 children to one book. One wonders why the gaps in some of the schools in some of the subjects had not been reduced by using the government capitation grant, 40% of which is supposed to be spent on text books, in order to supplement the textbooks from CARE.

In addition not all the books procured by the school get used. This was also found by other studies (URT, PHDR, 2007, p. 28). If there is an extension of the Project more close monitoring of the access to textbooks will be necessary to ensure that the students, particularly the girls, have access to quality education. If the government of Tanzania will be a partner in the new phase, then it should undertake to ensure that the capitation grant is used responsibly and in accordance with the proscribed allocation. Any ratio that is more than 2 students to a book detracts from access to quality education. An assessment was made of the perception of the various groups with respect to their perception of the adequacy of text books. The results are summarised below (see Table 15)

Table 15: Perception of Adequacy of Text Books

Adequacy	Boys (n=52)	Girls (n=40)	Women (n=44)	Men (n=42)	Teachers (n=20)	Sch.Cmtt (n=28)
Bad	19.2%	30%	22.7%	4.8%	20%	----
Average	34.6%	2.5%	29.5%	50%	35%	17.9%
Good	38.5%	17.5%	31.8%	21%	25%	75%
Very Good	7.7%	50%	15.9%	23%	20%	7.1%
Total	100%	100%	100%	100%	100%	100%

Again while there was great admiration for the improvement in the access to textbooks as a result of the intervention from CARE, there were obvious perceptions about the gaps. Girls had the highest score for “Very Good” but also the highest score for “Bad.” Less than 10% of the boys felt that the situation was “Very Good” while about 20% felt that it was “Bad.” About 20% of the teachers felt that the situation was “Bad.” *So why did they not take any action?*

This perception of the adequacy confirms the fact that the improvement in access was not uniform in all schools, all classes or all subjects. The provision of books to schools in any future extension of the Project should ensure that the schools (a) keep good records of what they have including the pupil to book ratio; (b) request for books to fill gaps in particular subjects rather than to just increase the overall number of textbooks; (c) make available to the girls and boys all the text books that are sent to the schools; and (d) be prepared to use the grant from the Ministry of Education to improve the pupils to book ratio.

4.2 Objective 2: Enhancing the Quality of Teaching

The assessment of this part of the project was more challenging since there were no tangible targets and it was difficult to observe the teachers in class or see their lesson plans due to the short time that we were allocated to carry out the field study. The goal of this objective was to ensure that the teaching was (i) learner centred; (ii) gender sensitive; and (iii) was participatory, enabling the children to participate in the classroom activities. This would require more than one

observation per teacher and there simply was no time to carry out even one observation. The assessment is therefore based on (i) the implementation of the activities aimed at improving the quality of teaching, (ii) the teachers' own perceptions of the value of the training that they received and (iii) the perceptions of the students, their parents, the School Committee and the teachers themselves on the quality of the teaching.

4.2.1 Improvement in the Number of Teachers 2008-2010

An assessment was made of the number of teachers in both the formal and non-formal schooling systems and the qualifications for the formal. All the teachers in all the schools were included in the discussion groups; where some were absent, the others reported on their training status. The results are shown below (see Table 16).

Table 16: Number of teachers in the Schools in September 2010

Schools	Number by Sex			Grade A by Sex			NFE teachers by Sex		
	M	F	T	M	F	T	M	F	T
Mela	4	1	5	4	1	5	1	1	2
Mwenge	3	1	4	1	--	1	2	1	3
Kimambila	3	2	5	3	2	5	1	1	2
Lubongo	5	3	8	5	3	8	2	2	4
Total	15	7	22	13	6	19	6	5	11

The Baseline that was carried out in March 2009 found that there were 14 teachers in total among the 4 schools of which only one was a female. All of them were Grade A teachers and one even had a diploma. By comparison there were 22 teachers in 2010 or an increase of nearly 60% between 2008 and 2010. It was achieved partly through the efforts of CARE in providing good housing near the schools, textbooks, and improved school structures, offices and furniture for teachers and partly through the efforts of the ward education officers in the two wards. The Project also provides honoraria to the Non-Formal Education Teachers.

However, notwithstanding this success, overall there was a shortage of 10 teachers if ideally each school was to have 8 teachers. Also the numbers were sometimes only statistics. In one village, Mela, there was only one teacher at the time of the Survey and he was the headmaster. One was studying but it was not clear as to what had happened to the other 3. The Project had to seek the assistance of the Ward Education Officer in order to allow 2 NFE teachers to teach in the formal classes to avoid several classes being without teachers. There was also a high degree of absenteeism. In Lubungo, on the day of the survey, (1st October, 2010), we could meet with only 4 out of the 8 teachers assigned to this school. The head teacher could not explain the reason for the absence. Absenteeism of teachers aggravates the problems caused by shortage of teachers (see Box 6).

Box 6: Shortage of Teachers and Absenteeism Affects Quality Teaching

Shortage of teachers is still a major constraint in providing quality education in the 4 schools in Mvomero District. As a result, classes are left without teaching and some subjects are taught very irregularly. For instance in Kimambila, it was stated that English and Mathematics was taught only once a week; they should be taught several time a week. In Lubungo, an exercise book for Civics of one of the pupils showed only half a page of notes for the entire period of January to September 2010.

This is not a problem of CARE or the Project but of the national education system. The Project is being carried out in partnership with the District Education Department in Mvomero District, which thus had the responsibility to monitor the situation with regard to adequacy of the teachers and the rate of absenteeism. The Project does not have the authority to question teachers about their presence/absence. The Project has made some great inputs – it is time that the Ministry of Education played its part in the partnership.

4.2.2. Implementation of the Project Activities to Improve Quality of Teaching

The CARE-SAWA –Credit Suisse Project made some commendable efforts to improve the quality of teaching. The Project had some specific activities with targeted outputs. The assessment of the implementation of these activities is based on the two progress reports of the Project and the validation of these activities by the teachers themselves. The main activities, targets and the level of implementation are summarised below (see Table 17).

Table 17: Promoting Activities for Enhancing the Quality of Teaching

Indicators	Target	Situation in 2009/10	% of Target
Teacher training in learner centred methods	75 %increase in the use of learner centred methods	32 trained *	Difficult to assess the increase since there was no baseline data. Also would have required lengthy classroom observations in each of the schools
Training on establishment of readership clubs	20 well functioning clubs	10 clubs established	50% of the target met
Training in library management	50% increase in library use	32 teachers trained	It was difficult to report on this indicator since there were no records of use
Training in lesson preparation	50% increase	13 /32 trained teachers had plans	40% said that they were preparing lessons but difficult to verify
Establishment of NFE centres	4	8 (11)++	175 % of the target met

*Information from the first and second progress report. **It was reported that the same teachers who had the first phase of training were included in the second training phase. ++ We were told that there were 11 centres.

4.2.3. Teacher Training & Use of the Training

The 2010 data for the Evaluation was based on interviews with teachers. These were carried out in each school. The number of teachers that reported that they had been trained in the four schools did not tally with the data in the Progress Reports. Therefore it was not clear as to what baseline figure for the teachers was used in order to state that the proportion of teachers trained was 89%. The reported number of teachers trained in the four schools based on interviews with

the teachers is shown below (see Box 9). The Project Coordinator added his own figures which are shown in parentheses.

Box 7: Enhancing the Quality of Teaching through Training

Numbers who reported that they had participated in the Training

- ✚ Mela 3 (5) formal; 2 NFE ;
- ✚ Mwenge : 2 formal ; none (5) from the NFE centres
- ✚ Kimambila: 5 formal; None (3) from in the NFE centres
- ✚ Lubongo: Formal 6; NFE 4

Total number of teachers in the formal and informal education that were trained = 22 . This does not tally with the 32 that was reported as having been trained in the Project Progress Reports.

The proportion of teachers that were trained was 22 and would thus be 66% (total equals 33: 22 teachers in the formal school plus 11 NFE teachers), rather than the figure of 89% given in the CARE Project Progress Reports. When asked about the discrepancy in the numbers, we were told that other teachers from the two wards had been included in order to raise the number to 32. The reason given for this inclusion was very commendable – CARE wanted the teachers within and outside the Project to benefit and to learn from each other. Nevertheless, there were some teachers in the four schools that had not been able to access either of the two phases of the training probably because they had been recently posted to the schools. *Nevertheless, they would need to have the same training as the others.*

Those who had been trained reported that the following topics were covered in the training:

- ✚ Participatory Teaching and Learning;
- ✚ Scheme of work and lesson preparation, ;
- ✚ Library management,
- ✚ English and Maths;
- ✚ Book procurement

During the 2010 survey, the teachers that were physically present during the day of the survey and who had participated in the training were asked how their teaching had changed since their training. The responses are summarised below (see Box 10).

Box 10: Some Ways in Which the Training has Changed Teaching

Mela:

- ✚ Use group work and participatory teaching more frequently.

Lubongo:

- The training has been helpful to the NFE teachers. Children from NFE classes have already entered Standard V which is reflective of the improvement of the teaching of the NFE classes
- The opportunity to work in groups has made children “children feel better.”
- Self-teaching has increased among children
- Teachers make better use of time to complete their lessons

Mwenge

- Get feedback from children about what was taught through participatory methods
- Use group teaching more frequently
- Are more organized through making lesson plans and schemes of work
- Has attracted more children in formal and non-formal schools

Kimambila

- Build the confidence of children by allowing children to participate
- Finds it easy to teach
- Reduces the teaching load

CARE had carried out a monitoring of the use of the training on the preparation of lesson plans and found that 13 out of the 32 or nearly about 40% were formulating lesson plans. However, we were not in a position to check the quality of the plans or observe the use of any of the other training such as Participatory teaching and learning. The time allocated for the fieldwork was too short to enable us to carry this out. For this aspect to be really effective, monitoring should not only look at the lesson plans prepared but also carry out class observations as well as discussions with the children. The assessment was also hampered by the lack of measurable indicators to assess the impact of the training in participatory teaching and learning. Nevertheless,

✚ *The one conclusion that can be drawn from these responses is that the teachers had become aware of learner centred training. The emphasis on group learning and feedback is a good indicator of this awareness. In this sense, the Project had achieved one of its goals of training – to imbue within the teachers the need for “Learner Centred Teaching”.*

✚ *It also appeared that the teachers were aware of and practising gender sensitive teaching because both the boys and the girls stated that both boys and girls were treated equally in school – boys (95%); girls (90%).*

4. 2. 4. Library management and use



According to the Project Progress Reports, two libraries have been established, one each in Mela and one in Lubongo. The girls and boys in Lubongo were aware of the library and reported that about 15 boys and 18 girls were using the library at noon (during lunch break). A good start has been made.

Figure 17: The Library with Shelves and Books in Mela

However, the children that we interviewed and the adults in Mela were not aware of the library although the teachers claimed that 6-7 used it daily. Further enquiries resulted in us finding out that most of the library books were in the teachers' office which discouraged children from accessing the library. There was even a board with a caption in both Kiswahili and English saying that Primary School Library but the board was in the teachers' office. We were able to persuade the head teacher to move the board and the books to the designated library room.

Much still needs to be done to improve both access and use of the libraries and the library books. This has to start with the teachers. To give one example in Mela, there is only one desk in the library for reading. Is the use going to be limited to 2 persons at a time? Even some mats on which children could sit and read would have been good. These mats would also help to create an atmosphere of informality in the library – a different situation than in the classroom where one had to sit at a desk. Thirdly, the notice board announcing the library that was shifted from the teachers' office to the designated library was put inside the library so there was no way that the children or adults could know that they now had a library.

- ✚ Thus one can conclude that the Project had established 2 libraries or 50% of its target in terms of setting up the libraries but at best only 25% of the target in terms of use.
- ✚ Nevertheless, it is a commendable start especially in Lubungo and especially if it can be sustained and expanded to other schools.
- ✚ It is also commendable since relatively few public primary schools have libraries and especially not in the rural areas
- ✚ The very fact that a library is available will create the idea that books can be read outside the classroom and motivate children to read outside the classroom environment

4.2.5 Readership Clubs

In Lubungo the girls reported that 20 persons had been selected from different classes so some attempt had been made to start up the readership clubs. However, nothing much had followed according to the girls and as far as they were concerned the clubs were not operating in Lubungo. The same was true of other schools. Our conclusion is that the readership clubs are still to be fully operational.

4.2.6 Non Formal Education (NFE) /(Memkwa)

One of the activities that were supported by the CARE/Suisse Credit Project was support for non-formal education which involved teaching out of school children who were too old to be enrolled in standard one. This alternative education system was to provide them with the basic skills and knowledge so as to enable them to take the national Standard Four Primary Education Examination. If they passed this examination they would then be eligible to join Standard Five in the regular primary school in their village and continue through to Standard VII and take the Primary School Leaving Examination (PSLE). If they did well in the PSLE, they could be selected to proceed to secondary education. The main support of CARE was in the form of allowances for the "Volunteer" teachers of the programme who for some reason do not qualify for regular salaries although they are often doing a better job than their salaried primary school teachers. The main advantage of the volunteers is that they are members of their communities.

All the four communities had Memkwa classes, some more than one (see Table 18). We could not find data in the Baseline for such classes in 2008 and 2009 so we could not tell the changes in the setting up of the classes or the attendance rate.

Table 18: Access to Education through Non-Formal Education

Village	Students		Number of Posts	Number of Teachers
	Female	Male		
Mela	20	3	2	2
Lubongo	74	12	4	4
Kimambila	14	9	2	2
Mwenge	29	15	3	3
Total	137	39	11	11

The analysis shows that there was a preponderance of females compared to males and we were told that it was because boys over the age of 14 years were not interested in studying. This form of education was thus mainly enhancing girls' access to education. Due to the challenges of time allocated for the survey, we could not meet with a sample of the participants. Another reason was that the classes were held in the villages and sub-villages whereas the focus of the 2010 survey was the primary school. The community members came to the school for their group discussions but we were not able to get a fair number of the Memkwa students to come to the school. We were thus only able to talk with one of the students (see Box 9).

Box 9: A Keen MEMKWA (Mpango wa Elimu ya Msingi kwa Walioikosa) Learner

The consultant was only able to interview one of the NFE students, a young girl aged about 12 years who had agreed to come to the school in Mwenge to be interviewed. Her family had just moved to Mwenge. She had to drop out of primary school in the former area of residence because her parents were migrating frequently. She was thus happy to be given the opportunity to have this alternative form of education in Mwenge, her new residence.

The consultant found her to be committed to her study program and she was proud to show her exercise books where she had done well, judging by the marking. Her teachers were obviously teaching her well because she could read fairly well from a Kiswahili book meant for Standard IV that was provided to her and when she finished reading the prescribed section she asked if she could keep the book. It was the consultant's own book so she was allowed to keep it. She was obviously keen to learn and join the formal primary school.

When the consultant talked with her teacher he assured me that she was sure to pass the Standard IV examinations and enter the formal primary school next year.

An Unexpected Bonus

Another heartening story related to Memkwa is that of young pastoralist women in Mela who told us this story when we asked them why education was important (see Box 10).

Box 10: Women Joining Memkwa Classes to Learn to Read and Write

The women stated that “We feel the disadvantage of not having education (tuko ngizani – we are in darkness).

- ✚ One of the women stated that she went to Morogoro Hospital for medical treatment. She was new to the area and did not know where the hospital was. She saw a queue and joined it thinking that it was a queue for the hospital – only to find that the people were queuing for using the ATM in the Bank! She was so embarrassed that on her return to Mela she decided to join the Memkwa classes in her village so that she could read notice boards.
- ✚ Another had joined the same class because she had acquired a mobile phone and she could not send or receive messages. She wanted to be able to send and receive SMS since calling was too expensive.
- ✚ Women cited several advantages of learning to read and write including being able to ensure that they received the correct amount of money for their milk and being able to read their children’s exercise books to find out how they were doing in their school work. They could thus monitor the progress of their children in school.

A check with the Memkwa teachers in other villages revealed that the examples from Mela were not isolated; it was happening in many of the Memkwa centres – younger married women were joining the NFE classes so that they could read and write. This development is an unforeseen bonus to the support provided by CARE/Suisse Credit in the four villages in Mvomero and the Project should capitalise on it. It can even help those girls who have to leave school due to early marriages. If there is another phase to this Project it should definitely consider expanding this form of adult literacy program particularly as it seems to particularly help women and girls.

4.3. Objective 3: Promote Community Ownership and Engagement in Education

4.3.1 General Observations

This “Objective” was designed to get the communities to be involved in facilitating pupils and especially girls to have better access to quality education. In order to set the process in motion, the Project had undertaken a number of activities. The implementation of these activities is summarised below based on the Progress Reports (see Table 19). The data was validated by information from discussions with members of the school committees, male and female parents and in-depth interviews with village leaders.

Table 19: Implementation of Activities to Promote Community Engagement in Education (Project Progress Reports)

Indicators	Target	Situation in 2010	% of Target
Training in procurement of books and building materials	school committees + teachers, pupils	51 persons: school com. teachers, pupils	100%
Training in School administration	4 School committees	All 4 school committees trained	100%
Monthly Mtgs of Sch. Committees	Monthly	June *2009-	100%
Community contributions	50% increase	US\$ 194,941/- Collected	50%

4.3.2 School Committees

4.3.2.1. Membership and Meetings

Members of the School Committees were one of key groups of respondents for the Final Evaluation. We are therefore able to talk about their role in promoting community ownership and engagement in education especially of girls, with greater confidence. The composition of the school committees, the frequency of their meetings and numbers that were met during the survey are shown below (see Table 20).

Table: 20: School Committees: Membership and Meetings

Schools	Membership of the Sch. Committee			Members met in 2010			Frequency of Meetings
	Male	Fem.	Total	Male	Fem	Total	
Mela	7	5	12	4	3	7	When there is need
Mwenge	8	4	12	6	2	8	8 times/year
Kimambila	5	3	8	4	3	7	4 t /yr +emergencies
Lubongo	8	4	12	3	3	6	At emergencies
			44			28	

4.3.2.2 Training by the Project

Out of those that were met the following proportions had had some training from the Project:

- Mela: (2 out of 5) 40%
- Mwenge: (5 out of 8) 62.5%
- Kimambila: (1 out of 6) 17%
- Lubungo: (None of the 6) 0%

When the Project Management was queried on the high proportion of the Committee members that said that they had not had training, the Evaluation Consultant was informed that in the beginning all the 51 committee members from the 4 schools had been trained but in August 2010, these had completed their term of office and were not re-elected. Some attempt was made to train the new members but some obviously were not able to participate. As in the case of new teachers entering the schools, the new committee members need to get the same level of training as their predecessors. The Project did not state the target for the proportion of the School Committee members that would be trained in each school so it is difficult to say whether the target had been met. It was obvious, however, that some members had undergone some training. It is not clear why in Lubungo we were not able to meet with even one member who had participated in the training.

It was also interesting that the perception of the topics of the training differed: The Project Management Team reported that general topics were taught to all the committee members but there were specific needs for each school committee and these were addressed as additional training.

Kimambila

-  How to supervise project materials
-  How to manage school activities

Mela

-  Importance of holding regular meetings;

- ✚ Importance of having meals in school;
- ✚ Following up on absent pupils

Mwenge

- ✚ Advocating parents to send children to school;
- ✚ Sustainability of the schools;
- ✚ Registration methodology (not clear if this referred to registration of the school).

Lubongo:

- ✚ None of the 6 School Committee members who came for the discussion group had received any training from the Project.

Members of the School Committees were asked as to how they supported the children's attendance in school. The responses are summarised in Table 21.

Table 21: Mechanisms of School Committee Support for Children's Access to Education

School	Ways of Support	%
Mela	Encourage parents to buy school uniforms	100%
	Encourage parents to feed their children well	86%
	Raise awareness among children that education is important	100%
Mwenge	Informing parents on child enrolment	100%
	Follow-up on absenteeism	100%
	Encourage parents to send children to school	75%
Kimambila	Encourage children to attend school	100%
	Support registration activities	43%
Lubongo	Writing letters to parents of absent pupils	100%
	Participate in pupils registration drives	50%
	Remind parents to send sick children to hospital	50%

The responses indicate that there is some follow-up by members of the School Committee. This differs somewhat from the perspectives of the children who felt that the follow-up was done mostly by the teachers. In a question on who they felt was the person that most supported their education the answers were as follows (see Table 22).

Table 22: Main Supporter of Children's Education

Person who supports education most	Girls	Boys
Parents	20%	27.5%
Grandparents	3.8%	4.8%
Teachers	13.5%	15.3%
Village Chairman	12.4%	---
Village Secretary	6.5%	---
School Committee Members	11.9%	6.9%
Relative	9.7%	8.5%
CARE	16.2%	27.5%
Government	5.9%	---
Akoka (NGO)	---	9.5%

The top 5 supporters for **Girls** were: Parents, CARE, Teachers, Village Chairman and School Members; for **Boys**: Parents, CARE, Teachers, Akoka (NGO) and Relative. This ranking bears evidence of the appreciation of the children for the support that they have received from CARE. It is encouraging that for both boys and girls, parents come first and teachers third. Committee members are not in the top five for boys and are the last for girls. The Committee members will need to do a great deal more to win the respect of the children.

4.3.3. Support from Parents

Parents were also asked about how they support their children to access quality education. The responses are summarised below (see Table 23).

Table 23: Ways in which Parents Support Their Children to Access Education

Ways of Support	Men	Women
Volunteering in construction	30.7%	25.4%
Participate in school committee meetings	15.0%	5.6%
Establish school committees	7.1%	--
Register students	7.1%	2.8%
Fetching water	16.5%	12.4%
Cleaning school compounds	7.1%	15.3%
Contributing funds for the school and paying school costs	9.4%	18.1%
Welcoming visitors	7.1%	13.6%

It was interesting that more women than men (almost twice as many) stated contribution of funds as one of the ways that they helped their children access education. This aspect needs further investigation since among the Maasai it is the males that control the household income and expenditure. The women did, however, sell milk and probably had control over the smaller animals such as goats. A better understanding of the division of control over the household income and expenditure would be necessary to better assess this aspect which can have important implications for empowering women in income generating activities.

In Shinyanga Region, CARE was supporting a program known as WAGE in which credit was given to women to enhance their income generating activities as a way for them to support their girls to access education. As the Tanzania Vision 2025 put it “ *In their role as reproducers and providers of family care, mothers have basic influence on human resources development because children spend a greater part of the development phase with their mothers*” (URT, Tanzania Vision 2025, p.58)

To sum up, members of the community were contributing towards promoting girls’ and boys’ access to quality education in some very substantial ways:

- ✚ Parents by paying for the children’s costs for sending children to primary school;
- ✚ By contributing cash, materials and labour for the school construction projects
- ✚ By raising awareness of the importance of education (members of the school committee)
- ✚ By participating in school meetings
- ✚ By making a follow up of absenteeism of teachers and children
- ✚ By getting children enrolled in the formal and NFE classes

The impact of these contributions was seen in the completion of the physical infrastructure and the increasing enrolment in Primary One and the NFE classes.

5.0 Quality of Education Accessed

In addition to the indicators in the Project Proposal, the Evaluation decided to assess the extent to which the interventions by CARE/SAWA had contributed towards access to quality education.

This was done in three ways: (i) by assessing the perception of the importance of education; (ii) the types of subjects taught and perceptions of what should be taught; (iii) and finally the competence in the subjects taught.

5.1 Awareness of the Value of Education

It was felt that the first pre-requisite to access education was for the children and parents to decide whether education was important to them. The response would also reflect the extent to which the project had raised awareness of the role of education in among the community members. The groups were first asked: How important is education? They had to choose from the following responses: “Very important”, “Important”, “Not Important.” The children were given the chance to answer the question in writing but the adults preferred a show of hands. The results are shown below (see Table 24). The overall response was that education was very important. However, the differences in the grading were equally significant. Among the boys one boy wrote that education was not important; 16% of the girls found that education was “Important” (but not Very Important) while 11% of the School Committee members also found that education was important (but not Very important).

Table 24: Importance of Education

Category of respondent	Very Important	Important	Not Important
Boys (n=42)	97.6%		2.4%
Girls	84%	16%	--
Female parents	100%	---	--
Male parents	100%	---	--
Teachers	100%	----	--
Committee members	89.3	10.7%	--

The respondents were also asked to say why education was important or not important. Children were encouraged to write out their answers but the adults categorically refused to do so. Therefore the method used for the adults was for one person to state a reason and then find out how many agreed with the response. The results are shown below (see Table 25).

Table 25: Reasons Why Education is Important

Reasons	Girls	Boys	Men	Women	Teachers	Sch. Committee Members
Key to life	21%	22%	17.4%	23.6%	20.5%	16%
Key to development	---	---	25.1%	5.6%	9.0%	
Ability to read and write	60.7%	30%	19.8%	12.4%	16.7%	14.9%
Ability to be employed	3.3%	16%	12.6%	18%	10.3%	14.9%
Enhance planning	---	4.0%	-----	----	---	
Alleviate ignorance	6.6%	6%	25.1%	16.8%	25.6%	27.6%
Ability to help others	1.6%	6%	-----			
Children's rights	----	----	-----	-----	6.4%	
Enhance innovation	-----	2%	----			
Learn new skills	3.3%	2%	----		11.5%	
Increase intelligence	3.3%	12%	-----	----	----	
Parents' future security				18%	----	
Stops early marriages	-----	-----	-----	5.6%	-----	
Makes you value health issues	-----	-----	-----	-----	-----	13.8%
Enhance relationships between tribes	----	-----	-----	-----	-----	6.4%
Good environment	----	----	-----	-----	-----	6.4%
Total	100%	100%	100%	100%	100%	100%

- ✚ Three reasons were common to all groups
 - Key to Life
 - Ability to read and write
 - Alleviate ignorance

- ✚ In the Baseline Study, the responses were not separated by category of respondents but overall *ability to read and write scored* the highest . Here it was the highest among girls. Why is the ability to read and write so important to girls compared with other aspects?

- ✚ Being able to get employment did not seem important to girls as it was to the other groups even the women. The question is why? Do the girls not want to be employed? Do they see their future only as wives?

- ✚ Why do boys and girls score getting new skills so low (2% for boys and 3% for girls)? This response seems to indicate that children do not see the school as the place where they get new skills

- ✚ We found these responses from the girls and boys rather sobering about their perception of education which is obviously based on their experiences in school. Quality education should provide new skills, new knowledge, and facilitate innovation. This was not the way that the children and their elders felt about “school.”

5.2 Ability to read and write

We also tried to assess the quality of education that the pupils received through some quick tests on their ability to respond to questions and/or write. We realise that the emphasis of CARE in the Terms of Reference was on reading but we felt that if they knew how to write we could

assume that they could also read. Each of the boys and girls in their group was asked to write an answer to one of the questions in the discussion guide, namely:

Why is education important?

They had to choose from the following three alternatives and write their answers in the exercise book or paper that was provided to them: (i) *muhimu* (important); (ii) *muhimu sana* (very important) or (iii) *sio muhimu* (not important). After answering the question they were then told to write down one or two reasons for their answer. The purpose of getting to write their answers was two-fold: (i) to test the writing/reading skills; (ii) to give the children the freedom to express their opinion on the value of going to school without being influenced by others. The detailed analysis of the answers to the original question and the reasons for their answers has been given above (see Table 12 and 13). On the question of ability to write by the children who were mostly from Standard VI, it was fairly good with a few exceptions where the words were all jumbled up with no space between the words and there were many spelling mistakes. In two instances, at least one child had to be assisted to read and write. Nevertheless, the overall conclusion is that the children were able to read and write.

It seems as if the teachers spend a great deal of time on teaching the children to read and write. No wonder that the majority felt that school is a place where you learn to read and write. While not denying the importance of literacy, at upper primary level, the children should have been taught other subjects. Therefore we did a brief test of other subjects.

5.3 Skills in other subjects

Other tests of what the children who were studying in the second highest standard in the school (and would be taking the Primary School Leaving Certificate within a year), should have known were less satisfactory. For instance,

- Many had difficulties in making a simple statement in English such as telling us their name orally -- “My name is” much less in writing it down.
- In a group of 15 children in Lubongo School, only two knew the number of months in a year and no one knew the number of days for each month for all the months
- In this same group most had difficulties knowing which was greater: three quarters or half. A simple exercise using a circle and dividing this into halves and quarters soon cleared the confusion showing that the children were quick to learn.
- A look at the exercise book of one of the children on “Siasa” (Government and Politics) showed only one half page of notes for the whole of 2010 – January to October 2010.

In the ensuing discussion it was reported that some subjects are taught very infrequently. In Mela for instance, in Standard VI, English and Mathematics were taught only twice a week instead of daily, Science only once a week. Another complaint was the lack of enough textbooks.

5.4 Constraints to Children’s Performance in School

A more comprehensive assessment was made of the reasons why children may not be doing as well as they should in many of the skills and subjects on which they were briefly tested. The analysis of the findings are summarised below (see Table 26). Respondents were asked as to what factors contributed to children not doing well in school.

Table 26: Reasons for Children Not Doing Well in School

Reasons	Girls	Boys	Men	Women	Teachers	Sch. Committee Members
1. No Self Study	12.6%	13.3%	---	--		8.6.2%
2. Children’s negligence	18.5%	19%	13.3%	16.3%	9.7%	18.8%
3. Absenteeism of teachers and Children	23.7%	25.6%	23.1%	19.4%	9.7%	18.8%
4. Parents’ negligence /ignorance	-----	7.2%	6.9%	11.2%	12.5%	14.5%
6. Teachers not teaching every day	15.6	----	-----	----	---	---
7. Low ability of pupils to learn	13.3%	16.4%	7.5%	----	5.6%	----
8. Poverty	---	9.2%	----	-----	5.6%	----
9. Few teachers	----	----	4.0%	11.2%		5.8%
10. Hunger	8.9%	9.2%	13.3%	22.4%	22.2%	8.7%
11. Poor teaching	-----	----	17.9%	12.2%		21.7%
12. Distance to school	-----	----	6.9%	----	9.7%	2.9%
13. No learning/teaching aids	----	-----	1.7%	-----		----
14. Few classrooms	-----	-----	5.2%	-----		----
15. Children’s selfishness	7.4%	-----	----	-----		----
16. No school resources (ex.bks)				10.2%		----
17. Teacher/parent relationship				6.1%		----
18. Language					12.5%	
19. Herding cattle/farming					15.3%	

Observations

- ✚ The three common reasons for children not doing well were said to be
 - ✓ Children’s own negligence
 - ✓ Absenteeism of children and teachers
 - ✓ Hunger
- ✚ The next most common reason was
 - ✓ Negligence of parents and
 - ✓ Poor teaching. .
- ✚ There were similarities and differences between constraints to attending school and constraints to children’s performance in school.
- ✚ One of the similarities was **Hunger** which has been researched and documented as having a negative effect on the performance of children in school.
- ✚ Another similarity is **Absenteeism** of teachers and children
- ✚ Absenteeism and poor quality of teaching constituted 40% and 41% of the reasons stated by members of the School Committee, and male parents respectively. It was thus seen as a major constraint to children’s access to quality education.
- ✚ **Early marriages and pregnancies** was not mentioned in the context of performance in school which is refreshing since these two reasons are often given by the official spokespersons as the main reasons why girls do not do well in school.
- ✚ **Parents’ negligence** scored high in the causes for poor performances and taken together with the “lack of self-study” shows that children are still involved in household chores so that they have little time to do “homework” or extra studies to improve their education.

However, in view of the fore-going, some these constraints are being addressed as seen by the level of the ability to read and earlier on in the number of children who were selected for secondary schools.

Nevertheless, more can be done through reducing aspects such as absenteeism of teachers, better adherence to the school curriculum including the frequency and comprehensiveness of the subjects taught, and making the school conducive for learning by finding out and addressing the reasons for why children do not like school.

Absenteeism of teachers (and of children) was seen to be a major factor contributing to poor performance by about 40% of the respondents. Women were particularly critical of the absenteeism and the quality of teaching. They asserted that even if children are selected to go to secondary education, they invariably fail at the national examinations for Form II. Children have to pass this examination in order to complete secondary school. In other words, the teaching was poor.

There are also more fundamental issues that need to be addressed such as Hunger/Poverty and Parents' Negligence in giving children the requisites to perform well including time for self-study. So while some progress has been made to address the constraints to good performance, more needs to be done, building on what has been achieved and finding new ways to meet the national challenge of gender equity in access to quality education.

6.0 SECTION THREE: CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

There has been considerable progress in the implementation of the three objectives of the Project on “Access to Quality Education by Girls” in the four schools in Mvomero District. CARE needs to be congratulated for a project that was well designed and implemented. Nevertheless, there are areas that need further attention to meet the goal of ensuring that girls in the four villages of Mvomero have equitable access to quality education.

Successes

6.1.1 Greater Awareness of the Role of Education in Development

There was a consistently positive opinion of the merits of education. This was shown not only by the over 90% of all respondents who said education was very important but also by the fact that adults were using the NFE classes to improve their literacy and numeracy skills and by the fact that 2 out of the four schools were planning to have a secondary school that was closer to their villages. In Mela which has the highest proportion of pastoralists, they had already begun to make bricks. Appreciating the value of education is the first step towards ensuring that girls and boys have full access to quality education. All the members of the communities in the four villages of the Project were well aware of the importance of education.

6.1.2 Good Progress in Increasing Access to Education

The targets for increased enrolment and completion rates were not met partly because they were unrealistic for such a short period for the change (between 2008 and 2010). Nevertheless there were increases in all the indicators and some outstanding success in others. There was almost a 50% increase in enrolment in Standard One and 100% increase in pre-primary within two years. This is outstanding especially in view of the declining enrolment rates nationally. This indicates that the Project has succeeded in raising awareness of the importance of sending children to school. The overall completion rates also showed an upward trend although it did not meet the target while transition to secondary schools showed an increase of over 100%. *In both cases, however, girls did less well than boys and this fact needs to be addressed.*

6.1.3 Excellent Progress in Improving the Physical Infrastructure

The benefits of the Project have been the most visible and most effective in the enhancement of the physical infrastructure of the schools especially in the provision of quality classrooms and teachers' houses. Not only has the appearance of the school changed but it has contributed towards attracting more children to be enrolled in the primary school. The impact of the progress is evidence of the importance of appropriate infrastructure towards improving access to education.

The textbook situation has improved greatly exceeding even the national children to book ratio. The fact that the children could complain about not having enough textbooks shows that (i) the textbooks are around although perhaps not evenly distributed; (ii) children are becoming aware

of the importance of access to textbooks in order to improve their learning. The children would not have complained about few textbooks if they had no measure to compare with. Obviously some classes had an adequate number while others did not. The children just wanted uniformity which is their right.

The provision of libraries in at least two of the four schools is a reminder that rural schools do not have to be worse off than their urban counterparts; in fact the two schools that had libraries were better off than many public schools in Dar es Salaam, the biggest municipality in the country. If the libraries can be sustained and extended to adult use, they have the potential to bring about fundamental change to the concept of reading which is currently associated only with classrooms and formal study.

6.1.4 Remarkable Success in the Non-Formal Classes

Another win-win situation has been the progress in Non-Formal Education which is facilitating girls and women to improve their skills in literacy and numeracy and enabling some of the over-age girls to join the formal primary schools. The NFE centres have shown that much can be achieved not only for the children aged 9 years and above but also for the parents. This dual benefit of the COBET/Memkwa education should be further enhanced in any future extensions of the Project. This is one of the aspects of the improvement of education facilities that have had positive comments from the children to the parents to the village leaders.

Concerns and Challenges

6.1.5 Total Enrolment of Children is Low

The numbers enrolled in the various classes in the 4 schools are low especially at the upper primary level. We did not have the population figures to assess the proportion that were in school against those that should have been in school but the numbers in the upper primary were too low. This might be due to the past when the enrolment was low and may improve now that enrolment in pre-primary and Standard One has improved but it may also be due to problems related to retention and hence a slow increase in the rate of completion which was only 7% compared to the targeted rate of 25%.

Thus while there is cause to celebrate the rise in enrolment in Standard One, it might cover less than 50% of those eligible to be enrolled. If in addition to that, there are challenges in retaining girls in the upper primary classes, the picture will not change. The main issue here is the lack of data on the Net Enrolment Rate (NER) for the four communities. This should have been provided by the District Education Department particularly as a partner in this Project. This data needs to be collected for future assessments.

6.1.6 Challenges in Access to Quality Learning and Teaching

The low level of the children's responses to the simple tests that we gave them and the 10% who do not like school is a cause for concern. The phenomenon of poor performance is not specific to the four schools in Mvomero alone; it is a national phenomenon as shown by a study carried out recently by the NGO, Uwezo. However, the project aims at access to quality education and the

low academic performance by the children in the four primary schools shows that children are not getting the full access to quality education.

The focus here is teachers and teaching. While CARE has provided some training to improve teaching, the main responsibility for ensuring quality teaching lies with the Ministry of Education and its representatives at the relevant district level. We feel that the Ministry could do more in terms of increasing and supervising the teachers and in ensuring that absenteeism is drastically reduced. The increase in the numbers and reduction in absenteeism will distribute the teaching load more evenly and ensure that all classes are taught as required. Teachers also need to improve their skills and the Ministry of Education should think about putting a teachers' resource centre nearby with solar power to run computers and videos would be one solution.

6.1.7 Addressing the Fundamental Socio-Economic Constraints

There is need to look at the overall socio-economic situation of the communities in which the children and come to school. Two basic needs stand out: the availability of water and Hunger but health facilities are also becoming critical. The most frequently mentioned reason for not attending school was illness – both in the Baseline and in the 2010 Survey. The Project will not be able to meet its goals in full if the fundamental socio-economic conditions are not addressed either through the Project or in partnership with the government.

The teachers also need support in terms of meeting their basic needs in a very hostile natural environment where there is no electricity and one can therefore not have a radio or television. In Kisarawe District several teachers have invested in solar power. Imagine the change if solar came to the four villages in Mvomero District. In Kigoma Region, the regional authorities were able to prevent the medical staff from running away from the remote area by providing them with good furniture and other amenities. The real challenge here is how to make the living conditions better so that teachers are willing stay and become committed.

6.2 Recommendations

In accordance with the conclusions stated above, the following recommendations are proposed.

6.2.1 More Appropriate Data Collection is Necessary

Firstly, there is need for an annual census of children eligible to be enrolled in Pre-Primary and Primary School Classes so as to be able to assess the proportion of children especially girls are enrolled in the relevant classes in the Primary School. The aim should be not only to increase the number but to ensure that the appropriate NER is met.

Secondly, there needs to be sustained monitoring of the retention rates. Challenges to retention should then be addressed jointly with the community, the Ministry of Education and other stakeholders to ensure that the intended target for completion rates is met. Challenges

6.2.1 Improvement of Teaching and Learning

This should be addressed at four levels: (i) Reducing the shortage of teachers. This is the responsibility of the Ministry of Education and should be regarded as a priority measure to

improve teaching. Even if all the present teachers attended everyday, there would still be classes without teachers and this would affect the quality of education accessed by girls and boys.

(ii) Improving teaching methods possibly through a Teachers' Resource Centre powered by solar power and with facilities that can enable teachers to use videos and computers to assist them to improve their skills; (iii) Improving the living conditions of teachers by assisting teachers to invest in solar power to enable them to use radios and even television and perhaps even have a refrigerator so that life becomes easier; (iv) Having at least one classroom or the library with solar power so that children can use videos and other electronic equipment for self-study and group work including helping each other with literacy, numeracy and other skills.

6.2.3. Effective Regular Monitoring of the Quality of Teaching

There is need to put in place an effective monitoring system jointly carried out by members of the community, the district education officers and the Project staff. This will also require formulating some measurable indicators. One of these indicators has to be the level of presence in class – the opposite of Absenteeism. Among the other indicators we propose the extent to which the teaching is (i) learner centred (ii) gender sensitive (iii) encourages self learning among children; and (iv) facilities and rewards innovativeness among children. Teachers should be observed for quality of teaching based on these indicators on a regular basis – at least once a term. There should be rewards for consistent high scores in the quality of teaching.

6.2.4 Establishing Savings and Credit Schemes for Women to Do Business

CARE should build on its experiences in WAGE and explore the feasibility of establishing a Savings and Credit Scheme for Women. Many of the women were making mats and other handicrafts. Maasai clothes and beads is another possibility. The ability to do business will have three benefits: (i) it will provide an incentive for the girls to study so that they can get the basic skills to do business; (ii) it will increase incomes so that mothers can meet the costs for sending children to school; and (iii) it might encourage trade with the nearest urban centres.

6.2.5 Addressing Major Socio-Economic Constraints

Two aspects are proposed: (i) the provision of water in the schools and the communities and (ii) School meals. The negative role of hunger on attendance and performance has been generally acknowledged in Tanzania and is being addressed in many areas in order to get more children to come to school and to improve their performance. The importance of water has been discussed in several sections of the report.

CARE-SAWA and Suisse Credit have contributed substantially towards improving girls' access in the four schools in Mvomero. It is hoped that our recommendations will be considered so that the children and the communities around these schools will benefit fully from these inputs.

REFERENCES

1. **CARE Tanzania** n. d. A proposal for Credit Suisse by Tom Caffrey, Boston-
2. **CARE Tanzania 2010** Education in Pastoral Societies; Six-Monthly Report, November 2009 to May 2010, Morogoro and Dar es Salaam
2. **CARE Tanzania 2009** Girls' Education in Pastoral Societies; Annual Report, December 2008-October 2009, Morogoro and Dar es Salaam
3. **Development Associates 2009** Final Report on the Baseline Study Undertaken in Four Villages in Mvomero District, Morogoro Region, Dar es Salaam.
4. **Mascarenhas, Ophelia 2007** Gender Profile of Tanzania; Enhancing Gender Equality, Prepared for SIDA and TGNP, Dar es Salaam
5. **Mascarenhas, Ophelia 2007** Baseline Study of the Situation Analysis of Girls' Education in Bugarama Ward, Shinyanga Region, Dar es Salaam, CARE, LEADER Program,
6. **URT 2009** *Poverty and Human Development Report*, Research and Analysis Working Group, MKUKUTA, Ministry of Finance, Dar es Salaam, 2009
7. **URT 1999** *Tanzania Development Vision 2025*, Dar es Salaam, Planning Commission,

APPENDIX I

Ratio of Children to Book by Subject & Class Based on Data from the Head Teachers of Each School

(* Denotes Examples of Data That Does Not Match the Data on Books Supplied by CARE)

School/Std	Hesabu CH : BKS	English CH: BKS	Kiswahili CH : BKS	Geografia CH : BKS	Uraia CH: BKS	Tehama CH: BKS	S/Kazi CH: BKS	Sayansi CH : BKS	Historia CH : BKS	H/Michezo CH:BKS
Mwenge I	None*	3 : 1	3 : 1	None	None	4 : 1	None	4 : 1	2 : 1	None
II	None*	1 : 1	1 : 2	None	None	1 : 1	None	1 : 1	1 : 2	None
III	None*	1 : 1	1 : 2	1 : 1	None	4 : 1	None	1 : 1	1 : 1	None
IV	None*	1 : 1	2 : 1	2 : 1	2 : 1	2 : 1	None	2 : 1	2 : 1	None
V	None*	2 : 1	1: 1		None	3: 1	None	1 : 1	3 : 1	3 : 1
VI	Not reached beyond Std. V	12 books	25 books	-----	-----	-----	-----	8 books	9 Books	-----
VII	-----	7 books	-----	-----	-----	-----	-----	7 books	9 books	-----

Kimambila I	2 : 1	2 : 1	1 : 1	None	None	2 : 1	None	5 : 1	None	None
II	1 : 1	1 : 2	1 : 1	None	None	3 : 1	None	2 : 3	None	None
III	5 : 1	2 : 1	1 : 1	1 : 1	3 : 1	5 : 1	None	3 : 1	1 : 1	None
IV	None	5 : 1	2 : 1	3 : 1	3 : 1	1 : 1	None	2 : 2	None	None
V	4 : 1	19 : 1*	4 : 1	5 : 1	8 : 1	6 : 1	6 : 1	4 : 1	4 : 1	6 : 1
VI	None	13 : 1*	2 : 1	None	None	None	None		None	None
VII	2 : 1	1 : 1	1 : 3	None	None	None	None	4 : 1	None	None

Lubongo I	2 : 1	2 : 1	2 : 1	None	None	5 : 1	2 : 1	13 : 1**	None	9 : 1
II	2 : 1	2 : 1	2 : 1	None	None	4 : 1	4 : 1	2 : 1	None	5 : 1
III	2 : 1	2 : 1	2 : 1	4 : 1	4 : 1	4 : 1	5 : 1	4 : 1	5 : 1	5 : 1
IV	1 : 1	1 : 1	1 : 1	1 : 1	1 : 1	1 : 1	2 : 1	1 : 1	1 : 1	1 : 1
V	2 : 1	2 : 1	2 : 1	3 : 1	3 : 1	2 : 1	3: 1	2 : 1	3 : 1	2: 1
VI	2 : 1	2 : 1	2 : 4	13 : 1	13 : 3	33 : 1	2 : 1	4 : 1	13 : 1	17 : 1

VII	1 : 1	1 : 1	1 : 1	None	None	None	2 : 1	1 : 1	None	None
------------	-------	-------	-------	------	------	------	-------	-------	------	------

School/Std	Hesabu CH : BKS	English CH: BKS	Kiswahili CH : BKS	Geografia CH : BKS	Uraia CH: BKS	Tehama CH: BKS	S/Kazi CH: BKS	Sayansi CH : BKS	Historia CH : BKS	H/Michezo CH:BKS
Mela I	3 : 1	1 : 2	1 : 1			2	9 : 1	4 : 1	2 : 3	
II	1 : 3	4 : 1	1 : 2			3 : 1	6 : 2	1 : 1	1 : 4	
III	2 : 5	4 : 4	1 : 3	1 : 1	4 : 1	6 : 1	6 : 1	3 : 2	1 : 2	2 : 3
IV	2 : 2	1 : 3	1 : 1	1 : 3	1 : 3	2 : 1	3 : 1	1 : 1	1 : 1	1 : 3
V	4 : 3	5 : 1	2 : 1	4 : 1	4 : 1	2 : 3	9 : 1	2 : 1	3 : 1	2 : 3
VI	6 : 1	9 : 1	2 : 4				17 : 1	3 : 4		
VII										

