

# Quality Education for the Pastoralist in Public Primary Schools in Kajiado County, Kenya: Case Study of Dupoto-E-Maa Education Project in Kajiado Central District

James Bill Ouda<sup>1</sup> Rose Atieno Opiyo<sup>1</sup> Pascal Wambiya<sup>2</sup>  
1.Masinde Muliro University of Science and Technology, Kakamega, Kenya  
2.Catholic University of Eastern Africa, Nairobi, Kenya

## Abstract

Conditions of learning are critical in determining quality of education. There have been real concerns raised by stakeholders regarding the quality of education for pastoralists in public primary schools in Kajiado Central District in Kenya. Interventions have been put in place to address the issue of quality education. One such intervention is the Dupoto-e-Maa education project. The study investigated the extent to which the project has promoted quality educations in terms of institutional capacity in the public primary schools in Kajiado Central District. The evaluation used both cross-sectional survey and phenomenological research designs. Phenomenological research design provides in-depth information about individuals, groups or institutions as they naturally occur. This design helped generate qualitative data through information gathered from head teachers, School Management Committees (SMC), teachers, pupils, Quality Assurance and Standards Officer (QASO) and project staff. The cross-sectional survey design assisted the evaluators to access quantitative data from a wide range of informants. A sample size of 183 respondents was selected using purposive sampling as well as stratified random sampling procedures. Head teachers of the sampled schools participated as key informants. The instruments of data collection used in the study included questionnaires, interview guide, document analysis guide, Focus Group Discussion (FGD) guide as well as observation guide. From the analysis it was concluded that Dupoto-e-Maa education project had significantly contributed to improved institutional capacity in terms of installing new facilities in schools as well as rehabilitating the existing ones. They were also involved in teacher training programs as well as stakeholders' awareness campaigns. The study recommends that the Constituency Development Fund (CDF), the County Government of Kajiado and the Government of Kenya (GoK) should allocate/commit more resources for improved infrastructure as well as in-service training and professional support of teachers. The findings could also be used to inform policy dialogue with regard to education for pastoral communities.

**Keywords:** Pastoralists, Quality education, Institutional capacity, Public primary school

## 1. Introduction

### 1.1 Background of Study

Education plays a very important part in any community's social, economic and political development. The importance of education has been adequately documented in the literature since it serves as the springboard for social, economic and political change. Long before the coming of Arabs and Europeans to Africa, the African people had developed their own systems of education; although the systems varied from one community to the other, their goals were often strikingly similar (Sifuna & Otiende, 1994).

In many parts of Africa including Kenya, Uganda, Ghana and Nigeria, before independence, schools were primarily run by missionaries, taught basic skills, and were often oriented toward producing religious leaders such as catechists, to assist missionaries in their work (Hodgson, 2008). In some of the Arid and Semi Arid Lands (ASALs), the British interest revolved primarily around securing the borders and exerting control over the nomadic pastoralist groups of the region. Social services such as education was little developed during the colonial period (Krätli & Dyer, 2009).

Formal, western style education was introduced in Kenya in the early 20<sup>th</sup> century during the colonial conquest of the territory. Most accounts indicate that pastoralists were not enthusiastic about education at first. As livestock herders dependent on children for herding labour and seasonal mobility for their survival, there was a poor fit between their production system and the design of formal education (Lanyasunya, 2012). According to the Bill of Rights, basic education is a fundamental human right (Republic of Kenya, 2012). Overall responsibility of guaranteeing this right is shared between different persons and institutions. The state and other stakeholders in education like the Non Governmental Organizations (NGOs) for example Dupoto-e-Maa provide the facilities, parents send their children to school, and teachers impart learning (Dadacha, 2009).

According to Lesorogol, (2008) in pastoralist communities, education is often seen as a privilege. It is not. It is one of the fundamental human rights that poor people are denied. Until very recently in the post independence era, the Government of Kenya (GoK) was not committed to providing and improving the standard and quality of education in pastoralist communities (Sifuna, 2005). Indeed, many Kenyans from the pastoralist

communities have acquired education due to the benevolences of the Catholic missionaries. The number of high school students from the ASALs making it to national secondary schools and public universities remains dismally low (Lanyasunya, 2012).

While ASALs cover about 80% of Kenya's landmass, support about a third of the country's human population and 70% of the national livestock herd (KNBS, 2010), educational disparities between pastoralist districts such as Kajiado Central and the rest of the country remain up to the present. This is consistent with United Nations Education Scientific and Cultural Organization (UNESCO, 2005) findings that pastoralist communities around the world have some of the lowest school enrollment. The figures from the Ministry of Education in Kajiado (MoEST, 2005a) put enrollments of girls at 40% (11,688) compared to 60% (17,572) for boys with primary school dropout rates of about 50%.

The Government of Kenya (GoK) is cognizant of the education situation in pastoralist communities and is moving towards a positive view of pastoralist's place in a modern, dry land economy (Krätli & Dyer, 2009). This quest is the basis of transformation of our society in key social sectors including education. The education sector is seen as crucial to the long-term economic blueprint, vision 2030, which plans to make Kenya a middle-income economy in two (2) decades. One of the flagship education projects in vision 2030 is to build at least one boarding primary school in each constituency in the pastoral districts. This is to ensure that learning is not disrupted as people move from one place to the other in search of pasture for their livestock (GoK, 2007).

In pursuant of the Millennium Development Goals (MDGs) and Education for All (EFA) goals coupled with the task of delivering the policies as set in the Sessional Paper No. 1 of 2005 on Policy Framework for Education, Training and Research (MoEST, 2005b); and more recently the Sessional Paper No. 14 of 2012 on Policy Framework for Reforming Education and Training Sectors in Kenya; the Republic of Kenya (2012) has been working with stakeholders in education to develop and secure funding for education programs. This is the basis upon which the Government, MoEST, individuals, communities, the private sector, Non-Governmental Organizations (NGOs) and other development partners jointly support the education sector.

The Sessional paper No.1 of 2005 was developed to help the Government achieve the following targets: Enhance access, retention, equity and quality in primary education through capacity building for education managers; Eliminate gender and regional disparities in Basic Education, and; Construct/renovate physical facilities/equipment in public learning institutions in disadvantaged areas, particularly in the ASAL (MoEST, 2005b).

The Basic Education Act of 2013 recognizes that every child has a right to free and compulsory basic education (Republic of Kenya, 2013). The government is committed to ensuring quality basic education conforms to the set standards and compulsory admission, attendance, retention and completion of basic education by all pupils (MoEST, 2005a). In the Act, the government also encourages collaboration and cooperation among education stakeholders involved in governance and management of basic education as well as to promote quality education in nomadic and pastoral areas (Republic of Kenya, 2013). In this view, various innovative methods of delivering social services by the stakeholders to pastoralists have come to light. One such initiative is the Dupoto-e-Maa project in Kajiado Central District, Kenya. The purpose of the project is to promote quality basic education in public primary schools among the pastoralists in the district (Timoi, 2008).

### *1.2 Quality Basic Education*

Provision of basic education has shown remarkable improvements since governments met in Dakar, Senegal in 2000 and committed to the goal of EFA (Carr-Hill, 2012). Since then, in sub-Saharan African countries, retention rate has improved, school fees have been abolished and the gender gap is closing (Davis & Coulon, 2007). Despite the achievements, quality education has been compromised and retention in pastoralist communities has remained low (UNICEF, 2008). The Republic of Kenya and UNICEF (2008) appreciate that parents place a high premium on quality education as it is seen as an opportunity out of poverty. Provision of quality basic education for all children is an obligation in the convention of the Rights of the Child, but parents in the pastoralist community seem to be oblivious to this fact (Republic of Kenya, 2010).

United Nations International Children Emergency Fund (UNICEF, 2008) recognizes that quality education includes learners who are healthy, well-nourished and ready to participate and learn and supported in the learning process by their families and community. The education should be offered in environments that are healthy, safe, gender sensitive and protective and provide adequate resources and facilities. According to UNESCO (2005), the teachers should be trained and skillful in pupil assessment to facilitate learning and reduce disparities. Quality basic education includes outcomes that encompass knowledge, skills, attitudes and values and linked to national goals of education and positive participation in society.

## **2. Purpose of the Evaluation**

Section 43 (1) of the Constitution of Kenya provides the right for every Kenyan to education (Republic of Kenya, 2010). In pursuance of the two education MDGs: to ensure UPE and to eliminate gender inequalities, the GoK is

conscious of the fact that the same will remain a mirage unless the nomadic pastoralist communities, who have been marginalized, are specifically targeted. Article 3 of the World Declaration on EFA in 1990 identified nomadic pastoralists as one of several groups who are discriminated against in access to education services (WDEFA, 1990).

The Ministry of Education (MoE) has developed a Policy Framework for Nomadic Education in Kenya (Republic of Kenya & UNICEF, 2008). One of the objectives of the policy is to enable Kenyan pastoralist communities achieve quality education. Notwithstanding interventions like Free Primary Education (FPE) program, the boarding school initiative and the School Feeding Programme (SFP), children from nomadic pastoralist communities continue to face many barriers including travelling long distances to school to access and complete basic education (Sifuna, 2005). In Kajiado Central District, provision of quality education opportunities faces several challenges. Low population densities and relatively harsh and isolated environments means that there are few and distant schools and qualified teachers are difficult to source. (Timoi, 2008).

Juma (2010) also recognizes that as a result of FPE, there have been reports of lack of an adequate teaching force in pastoralist communities which does not augur well for the quality of basic education being delivered in the public primary school level in Kajiado Central District. As an intervention by education stakeholders to improve the quality of education in Kajiado Central District, the Dupoto-e-Maa education project was implemented to address the challenges faced by pastoralists in acquiring quality basic education in public primary schools. Since its implementation in 2007, the project had not been evaluated by an external evaluator. Based on this realization, the purpose of the study was to conduct a formative evaluation by an external evaluator to assess the extent to which the Dupoto-e-Maa project as an intervention has promoted quality basic education for pastoralist children in the project supported public primary schools in Kajiado Central District.

### **3. Evaluation Questions**

How has the Dupoto-e-Maa education project affected institutional capacity of the project supported schools in Kajiado Central District?

### **4. Theoretical Framework**

The Human Capital Theory (HCT) states that a person's education is an investment in her/his human capital. This makes the individual more productive and accrues him/her a future stream of benefits (Psacharopoulos & Patrinos, 2004). It assumes that formal education is highly instrumental and even necessary to improve the production capacity of a population (Olaniyan & Okemakinde, 2008). The attitude regarding education as an investment with tangible, generally monetary returns reflects the widespread, instrumental view of education. Investment in human capital is seen as one of the areas of economic recovery identified by the GoK (Republic of Kenya, 2012). Parents place a high premium on quality of education as this is seen as an opportunity out of poverty (Republic of Kenya, 2008).

Human capital revolves around the need to have a population that has acquired skills, hence empowered to contribute to economic, social and political development (Government of Kenya, 2007). For the country to achieve the desired economic growth targets and social development, high priority needs to be placed on the development of human capital through education. According to the MoEST (2005b) there is a strong correlation between education, human capital and earnings. Abdi (2010) notes that educating pastoralists is one of the ways to improve their human capital: increasing their skills improves their ability to compete for a better life while contributing to the economic growth of the country.

### **5. Evaluation Model**

The evaluation is supported by the Context Input Process Product (CIPP) model of evaluation by Daniel Stufflebeam. According to Stufflebeam (2004) the CIPP model emphasizes that "Evaluation's most important purpose is not to prove...a program" (p. 4). The central concern of the evaluation is to identify and meet the information needs of the managerial decision makers. The context evaluation examines the goals and objectives of the program. Input evaluation provides information on the available resources and how they can be utilized to achieve project objectives. The process evaluation includes examining the activities and outputs involved in program design and logic, implementation and evaluation. Product evaluation is defined as establishing, with as much certainty as possible, whether or not an intervention is producing its intended outcomes (Rossi, Freeman, & Lipsey, 1999).

### **6. Evaluation Design and Methodology**

#### *6.1 Evaluation Design*

The study adopted a cross-sectional survey and phenomenological research designs. The two designs were used to select a cross section of the research target population at one point in time and within the natural setting of the project supported schools in Kajiado Central District. The mixed design approach was necessary as it assisted the

researcher to collect both qualitative and quantitative data from stakeholders in the Dupoto-e-Maa education project. Quantitative and qualitative approaches as Kerlinger and Howard (1999) noted, are more than simply differences between research strategies and data collection procedures. Rather they represent different epistemological frameworks for analyzing the nature of knowing, the nature of social reality and the procedures for grasping a phenomenon under investigation. The choice for the mixed method design was also guided by Michael (2002) who notes that the use of numbers and description of words which anchors both quantitative and qualitative research paradigms are mutually complementary. The strengths of both can produce a research synergy in which the whole collective benefits are greater than what is obtained from either designs alone. Each of the designs has its individual strengths and weaknesses. When both qualitative and quantitative designs are used in the same study, the strengths are maximized and the weaknesses minimized. The use of the two thus helps to corroborate the findings for robustness and credibility Wiersman (1995). This is justifiable given that data obtained via quantitative measures was complemented by the data obtained qualitatively.

### *6.2 Location of Study*

The study was conducted in Kajiado Central District, Kajiado County in Kenya. This region is classified as ASAL with no continually flowing rivers. It is located in the Southern part of Rift Valley Province and borders the Districts of Machakos and Makueni to the East, Kiambu and Nairobi to the North, Narok and Naivasha to the West and Loitokitok and Republic of Tanzania to the South, (Gachimbi, 2002). Providing educational opportunities for the children of pastoralists in Kajiado Central District poses several unique challenges. Low population densities and the relatively harsh and isolated environments that pastoralists inhabit means that schools are few and distant and qualified teachers are difficult to source.

### *6.3 Target Population*

The research population was drawn from eighteen (18) public primary schools in Kajiado Central District implementing the Dupoto-e-Maa education project. The population of interest for this study comprised parents, teachers, government officers and the administration of the primary schools implementing the Dupoto-e-Maa education project. School Management Committees (SMCs), pupils and project staff were also targeted.

### *6.4 Sample and Sampling Procedures*

The study used both probability and non probability sampling procedures to select the desired sample for the study. Nine (9) schools were sampled using stratified random sampling. Purposive sampling technique was used to select 3 SMC members from each of the sampled school giving a total of 27 SMC members. 2 project staff and 1 QASO were also purposively sampled. Stratified random sampling was used to select twelve class 7 pupils from each school for the Focus Group Discussion (FGD). Four (4) teachers were also selected from each of the sampled school using stratified random sampling making a total of 36 teachers. The head teachers of each of the sampled schools were included in the study as key informants. In total, 183 respondents were sampled for the study.

### *6.5 Data collection Instruments*

The evaluator used the following instruments: questionnaire for teachers, questionnaire for Project staff, questionnaire for QASO, interview guide for head teachers, and an interview guide for the parents. Focus group discussion guide for pupils was used to collect information from them. An observation guide was used to collect data on school physical facilities and document analysis schedule was used to collect data.

### *6.6 Data Analysis and Presentation*

The qualitative data analysis was on-going as the evaluator collected data from the research site. Field notes based on the interviews, discussions and observations provided the data. The information was processed and analyzed through the following steps: recording the interview using a tape recorder, data cleaning, transcribing the record, classification of various responses; identifying key responses for various themes; listing and tallying key responses by specific themes; identifying patterns emerging from key responses; studying the interrelationships between identified patterns and themes and drawing inferences from the themes and their interrelationships. Quantitative analysis began with field editing to minimize errors. Data coding, entry, cleaning, transformation, analysis and interpretation followed in that order. Quantitative data collected were analyzed on the computer using the Statistical Package for Social Sciences (SPSS) software version 21.0 to run descriptive analysis. The data was analyzed using descriptive statistics.

## **7. Presentation and discussion of the findings**

### *7.1 Demographic Information of the Respondents*

A total of 173 respondents participated in the evaluation as shown in Table 1. Head teachers were eight, 7 male

and 1 female. Pupils were one hundred and four (104), 66 boys and 38 girls. SMC members drawn from the nine schools at 3 members per school were sixteen (16) male and 9 female. The total male respondents in the study were 67.6% while female respondents were 32.4%. This ratio did not represent gender balance in the distribution of the respondents.

**Table 1 Distribution of the respondents by gender**

Category	Male		Female		Total	
	N	%	N	%	N	%
Head teachers	7	87.5	1	12.5	8	4.6
Pupils	66	63.5	38	36.5	104	60.1
SMC members	16	64.0	9	36.0	25	14.5
QASO	1	100.0	-	-	1	0.6
Project staff	1	50.0	1	50.0	2	1.1
Teachers	26	78.8	7	21.2	33	19.1
<b>Total</b>	<b>117</b>	<b>67.6</b>	<b>56</b>	<b>32.4</b>	<b>173</b>	<b>100.0</b>

Table 2 shows the demographic information of the head teachers.

**Table 2 Demographic Information of Head Teachers**

Background Variables	Frequency	Percentage (%)
<b>Gender</b>		
Male	7	87.5
Female	1	12.5
<b>Level of Education</b>		
Diploma	4	50.0
P1 trained	1	12.5
Bachelors Degree	3	37.5
<b>Working Experience</b>		
11 – 15 years	1	12.5
16 years and above	7	87.5
<b>Category of School</b>		
Day Mixed	3	37.5
Day and Boarding	4	50.0
Boarding	1	12.5

The head teachers were aware of Dupoto-e-Maa intervention in their schools. The period of stay in their schools had enabled them participate effectively in Dupoto's operations. Findings show that head teachers had a wealth of experience in the education sector. The activities of Dupoto-e-Maa that centre on institutional capacity require experience and sound leadership. Table 2 also shows that the level of education of the head teachers' meaning that they were qualified to teach and serve as head teachers their respective schools. Demographic information of the pupils: The pupils in the FGD were one hundred and four (104) in total. The sample was quite representative, though not balanced in terms of gender as reflected in Table 1. Factors that affect boys in school retention may not necessarily be the same that affect girls. This is why it was necessary to have both groups represented.

### 7.2 Aspects of the Project put in place to Improve Institutional Capacity for Quality Education

The project has been involved in several institutional capacity building activities in the project schools. These were aimed at filling the gaps identified in relation to institutional capacity. Gaps in school leadership and management were identified by the project at two levels. These include at the school head teachers' level and at the SMC/PTA level. Training, mentoring, coaching and exchange visits were organized as part of the project's components.

The respondents were asked to indicate the aspects that the Dupoto-e-Maa education project had put into consideration in trying to improve the public primary schools' capacities so as to provide quality education. Some of the aspects brought across, as indicated in Table 3 included improving teacher standards of teaching, improving quality of educational materials and the adequacy of physical facilities in the schools.

**Table 3 Distribution of the Respondents on the Aspects of the Project put in place to Improve Institutional Capacity for Quality Education**

Statement	Teachers				Head Teachers		Project Staff		QASO	
	Yes		No		Yes	No	Yes	No	Yes	No
	F	%	F	%						
Improving teachers standards of teaching through in-service training, workshops	17	51.5	16	48.5	7	1	2	-	1	-
Improving the quality of educational materials available for learning	14	42.4	19	57.6	7	1	2	-	1	-
Ensuring that the physical facilities such as classrooms and desks are adequate to sustain effective learning process in my school.	17	51.5	16	48.5	5	3	2	-	-	1

Slightly over half of the teachers (51.5%) indicated that in-service training workshop for teachers is one of the interventions that the project has put in place to improve the teaching standards. According to UNESCO (2005), the teachers should be trained and skillful in pupil assessment to facilitate learning and reduce disparities. Training in guidance and counseling for staff managing boarding schools should be encouraged so that awareness is created on how best to handle the pupils in that environment (Bevan, 2007).

Some of the teachers (42.4%) who were sampled by the study were of the opinion that the Dupoto-e-Maa Education Project had improved the quality of educational materials available for learning by the pupils in project schools. This is critical because, factors such as on-site availability of lavatories and clean water supply, classroom maintenance, space and furniture availability all have an impact on learning. When pupils have to leave school and walk significant distances for clean drinking water, for example in pastoralist communities, they may not return to class (Carr-Hill, Ondijoo & Saleh, 2011).

Most of the teachers (51.5%) who responded to the study thought that the education project had made effort in ensuring that the physical facilities such as classrooms and desks are adequate to sustain effective learning process in my school. The learning environment in schools must be improved by the education stakeholders through the provision of furniture and new curriculum materials. Furniture and appropriate curriculum material improves quality of education (Krätli & Dyer, 2009).

Parents reported that the project had been able to play a pivotal role in improving the institutional capacity of the schools. They noted that in improving the institutional capacity of the schools, the project had been able to hold training workshops for the SMCs on school management as well as promote and conduct exchange programmes whereby teachers got the opportunities to benchmark, share and learn from teachers in other schools regarding various effective teaching practices. Further, the parents indicated that the project contributed financially in the construction of facilities such as classrooms, dormitories and other physical facilities so as to improve the quality of education.

The project had also conducted workshops for Parents Teachers Associations (PTAs) and SMC's as well as improve school infrastructure. Teachers were being supported by the project with bursaries to encourage them undertake in-service training programs. PTA meeting were being held on a regular basis, unlike before the project. Parents monitored their children's academic performance through visiting the school to find out how pupils were performing academically.

The provision of the above mentioned training workshops for education stakeholders and provision of facilities in the improvement of institutional capacity of the project supported schools has been conceptualized as to enhance quality of education. In line with these findings is Ogula (2001) observed that availability of textbooks, blackboards, regular supply of chalk, learning aids, teachers; furniture, libraries and laboratories had a direct influence on the quality of education on offer.

### 7.3 Adequacy of Facilities in Project Schools

The respondents were asked to indicate the adequacy of the various facilities in the school. Table 4 below shows their responses.

**Table 4 Distribution of the Respondents on the Adequacy of Various Facilities in their Respective Schools**

Facility/personnel	Teachers				Head Teachers	
	Adequate		Inadequate		Adequate	Inadequate
	F	%	F	%	F	F
Water tank	12	36.4	21	63.6	3	5
Classrooms	22	66.7	11	33.3	7	1
Office(s)	11	33.3	22	66.7	2	6
Toilets	11	33.3	22	66.7	2	6
Dining hall	7	21.2	26	78.8	2	6
Dormitories	6	18.2	27	81.8	1	7
Staffroom	12	36.4	21	63.6	2	6
Teacher's chairs	7	21.2	26	78.8	2	6
Teacher's tables	4	12.1	29	87.9	1	7
Stores	-	-	30	100	1	7
Office furniture	11	33.3	22	66.7	3	5
Desks for pupils	6	18.2	27	81.8	1	7
Chairs for pupils	6	18.2	27	81.8	1	7
Textbooks	11	33.3	22	66.7	3	5

In terms of facility adequacy, an overwhelming majority of the teachers (63.6%) indicated that the water tanks in the school were inadequate. This was also reflected among the responses provided by the head teachers who indicated that indeed the water tanks in the school were inadequate. The researcher observed that in most of the schools there was one big tank used for water storage. This was not adequate especially in boarding schools. In some of the day schools, pupils were asked to carry with them a bottle of water in the morning as they go to school.

Majority of the teachers (66.7%) indicated that the school classrooms were adequate. However, a third of them (33.3%) indicated that the classroom facilities were not adequate. It was observed by the researcher that most of the schools had adequate classrooms to conduct lessons. However, there are quite a number of facilities which majority of the respondents indicated that they were not adequate. These key facilities included but may not be limited to desks and chairs for pupils, office(s), toilets, dining hall, staffroom, stores and office furniture. The researcher observed that sanitation facilities were available in the schools, with boys using a separate facility to the one used by girls. It was observed that most of the facilities were not very clean, perhaps due to the inadequate water in the schools. The dormitories were also available in some of the schools, but the researcher observed that they were not adequate.

## 8. Conclusion

Dupoto-e-Maa has played a significant role in improving the institutional capacity of the project supported schools so as to enhance the quality of education. One of the major ways through which the institutional capacity has been improved has been through the construction of physical facilities such as classrooms, dormitories, staff rooms and offices among many others. Through the project, teachers have been able to improve their teaching skills by enrolling in in-service teacher training programs, the quality of educational materials have also been improved as well as the physical facilities such as classrooms and desks. The improvement of teaching standards has been realized through the in-service training workshops that have been held frequently. The SMCs, teacher and head teachers have been capacity build on management of schools through workshops as well as benchmarking. It appears that the findings point that institutional capacity of the project supported schools had been significantly addressed in terms of personnel in the schools as well as infrastructure that support learning activities in the project schools.

## 9. Recommendations

Based on the findings, the study recommends the following measures:

1. There is need for increased financial resources so as to address the issue of adequacy of facilities in project supported schools. This will also increase the visibility of the project's activities on institutional capacity. The project could be linked to national programmes and processes like CDF and the County Government of Kajiado who would allocate/commit resources for project activities, hence improved project sustainability.
2. Address the issues of policy dialogue at national level with regard to teachers and teacher deployment to ASALs. There would be need to look into the teaching and living conditions of teachers allocated to

- teach in pastoralist communities, and introduce incentives where possible.
3. Increase the number of implementing agencies with similar activities to those of Dupoto-e-Maa project and project schools for wider coverage and greater impact.

### Acknowledgment

The study acknowledged the project manager and the entire team of Dupoto-e-Maa education project for making it possible for this study to be undertaken to its conclusion.

### References

- Abdi, I. A. (2010). *Education for All: Reaching nomadic communities in Wajir Kenya- -Challenges and opportunities*. Unpublished MRes Thesis, University of Barmingham, UK.
- Bevan, J. (2007). *Between a rock and a hard place: armed violence in African pastoral communities*. Nairobi: UNDP.
- Carr-Hill, R. (2012). Finding and then counting out-of-school Children: *A Journal of Comparative and International Education*, 42 (2), 187-212.
- Carr-Hill, R., Ondijoo, D., & Saleh, D. (2011). *Situational assessment of pastoralists in Somalia*. Nairobi: Horn Relief
- Dadacha, G. L. (2009). *Kenya: The Politics of Deprivation and Separation – The Case of Northern Kenya*.
- Davis, N., & Coulon, A. (2007). *Evaluation of the UNESCO Institute of Statistics*.
- Martin, Jenkins & Associates for Internal Oversight Service, Evaluation Division, UNESCO, <http://www.uis.unesco.org/Library/Documents/UISevaluation2007>
- Gachimbi, L. N. (2002). *Technical Report of Soil Survey and Sampling Results: Embu – Mbeere Districts, Kenya*. Land Use Change Impacts & Dynamics (LUCID). Project Working Paper, Nairobi, Kenya. International Livestock Research Institute.
- Government of Kenya. (2007). *Kenya Vision 2030. A globally competitive and prosperous Kenya*. Nairobi: Government Press.
- Hodgson, D. L. (2008). *The Church of Women: Gendered encounters between Maasai and missionaries*. Bloomington: Indiana University Press.
- Juma, M. (2010). *Security and regional cooperation in Africa: how can we make Africa's security architecture fit for the new challenges?* In Heinrich Böll Foundation Climate change, resources, migration - securing Africa in an uncertain climate. Cape Town.
- Kenya National Bureau of Statistics (KNBS). (2010). *2009 Kenya population and housing census*. Nairobi: KNBS.
- Kerlinger, F. N., & Howard, B. L. (1999). *Foundation of behavioral research* (4<sup>th</sup> ed.). New York: HBJ College and School Division.
- Krätli, S., & Dyer, C. (2009). *Educating mobile pastoralists: A strategic review of literature*. Education for Nomads Issues Paper #1. London: IIED.
- Lanyasunya, A. R. (2012) Factors affecting access to basic formal education among nomadic pastoralists of Northern Kenya: A case of Samburu. *Research on Humanities and Social Sciences*, 2 (10), 124-131.
- Lesorogol, C. K. (2008). Setting themselves apart: Education, capabilities and sexuality among Samburu women in Kenya. *Anthropological Quarterly*, 81 (2), 551-577.
- Michael, V.P. (2002). *Research Methods in Management (5TH Ed.)*. Mumbai: Himalaya Publishing House.
- Ministry of Education Science & Technology. (2005a). *Sessional Paper 1 of 2005 on Policy Framework for Education, Training and Research*. Nairobi: Government Printers.
- Ministry of Education Science & Technology. (2005b). *Kenya Education Sector Support Programme [KESSP] 2005-2010*. Nairobi: MOEST.
- Ogula, P. A. (2001). *Monitoring and evaluation of educational programs and projects*. Nairobi: New Kermit publishers.
- Olaniyan, D. A., & Okemakinde, T. (2008). Human Capital Theory: Implications for education development. *European Journal of Scientific Research*, 24 (2), 157-162.
- Psacharopoulos, G. and H. Patrinos (2004) "Human capital and rates of return", Chapter 1 in Johnes, G. and J. Johnes (eds.) *International Handbook on the Economics of Education*. Edward Elgar.
- Republic of Kenya. (2010). *The Constitution of Kenya*. National Council for Law Reporting. Office of Attorney General.
- Republic of Kenya. (2012). *Sessional Paper No. 14 of 2012 on Reforming Education and Training Sectors in Kenya*. Nairobi: Government Printers.
- Republic of Kenya. (2013). *The Basic Education Act*. Nairobi: Government Printers.
- Republic of Kenya, & UNICEF. (2008). *Policy Framework for Nomadic Education in Kenya*. Nairobi: Government Printers



- Rossi, P. H., Freeman, H. E., & Lipsey, M. W. (1999). *Evaluation: A systematic approach* (6th ed.). Thousand Oaks, CA: Sage Publications.
- Sifuna, D. (2005). Increasing access and participation of pastoralist's communities in primary education in Kenya. *International Review of Education*, 51 (56), 499-516.
- Sifuna, D. N & Otiende, J.E. (1994). *An Introductory History of Education*. Nairobi: Nairobi University Press.
- Stufflebeam, D. L. (2004). The 21st-Century CIPP Model: Origins, Development, and Use. In M. C. Alkin (Ed.), *Evaluation roots* (pp. 245-266). Thousand Oaks: Sage.
- Timoi, S. S. (2008). *Pastoralist education annual report*. Activity report. Kajiado District.
- United Nations Education Scientific and Cultural Organization (UNESCO). (2005). *Education for All: The Leap to Equality*. EFA Global Monitoring Report 2003-04. Retrieved 1/5/07 from [portal.unesco.org/education/en/ev.php-url\\_id=23023&url\\_do=do\\_topic&url\\_section=201.html](http://portal.unesco.org/education/en/ev.php-url_id=23023&url_do=do_topic&url_section=201.html)
- United Nations International Children Emergency Fund (UNICEF). (2008). *Curriculum report card*. Working Paper Series, Education Section, Programme Division. New York, NY: Author.
- Wiersma, W. (1995). *Research Methods in Education. An introduction*. London, Allyn and Bacon.
- World Declaration of Education for All (WDEF). (1990). *World Declaration of Education For All: Meeting Basic Learning Needs*. World Conference on Education for All, Jomtien, Thailand.