

Factors Affecting Access to Basic Formal Education among the Nomadic Pastoralists of North Kenya: A Case of the Samburu.

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Abstract

The focus of this study was to examine factors affecting access to basic formal education among the nomadic pastoralists in Kenya with specific reference to the Samburu. Despite education being one of the basic human rights and an empowerment prerequisite, its accessibility among nomadic pastoralists in Kenya has remained low. This study therefore tested the influence of *facility* specific factors, (such as real and opportunity cost of education, distance to school), *background* factors, (such as sex of the child, domestic work done by children, mobility of the household, perceived importance of formal education by parents/guardians, occupation of guardian, guardian's education, parental participation in school matters), and agro-ecological zones/regions on access to basic formal education among the Samburu. To facilitate the data collection, Samburu County was stratified into three clusters (zones), namely, Highland-Rural, Lowland-Rural and Urban. Multi-stage and random sampling were used to select 200 household heads. Data were collected and analysed using SPSS computer packages and further presented using descriptive and inferential statistics. The study findings revealed that distance, cost, domestic work, gender, guardian's education level and occupation, and mobility of the household were the main factors that affected access to basic formal education among the Samburu and by implication other nomadic pastoralist. As a result, the study recommended for more schools to be availed, make formal education flexible, improve infrastructure and promote diversification of livelihoods among the Samburu.

Keywords: Nomadic education, nomadic pastoralists, basic education access, samburu

1. Introduction

Education is universally recognized as one of the basic human necessities and rights and an empowering factor. This importance of education makes it a key area of public policy in all countries. The Kenya Government puts a lot of emphasis on basic education with one of its objectives being to ensure universal access to quality and relevant primary education. Unfortunately, major disparities exist in Kenya in school enrolment levels. For example, while access to basic formal education approached 100% way back by 1990 in many of the settled areas, access in some nomadic pastoralists areas was still low, like 30% in Samburu County. Currently, 32 years later, the enrolment is still low at less than 50%. This scenario affects the pastoralists' quality of life as they continue to lag behind in all aspects of development. This too affects Kenya's realization of education to all. It is in the light of the above background that this study tried to seek answers to the factors that affected access to basic formal education among the nomadic pastoral communities in northern Kenya with specific reference to the Samburu.

2. Literature review

Since independence in 1963, the Government of Kenya has striven to enhance access to basic to education in Kenya. A guiding philosophy underlying the country's education policy has been the commitment that every Kenyan has an alienable right of access to education (Government of Kenya 1964; 1965).

Early influence on formal education in Kenya arose from contact with the Europeans. Evangelism and education activities started along the coast before 1900 but the building of the railway opened up the inland. The development of cultural nationalist movements too helped speed up development of education though this intensified educational inaccessibility as relatively rich and informed districts could raise more money to finance educational development. The districts such as Baringo, Samburu, Narok, Kajiado, West Pokot and those in the North Eastern province had real problem in getting their educational programmes off the ground due to limited resources. At independence, in 1963, the primary school enrolment in Kenya as a percentage of school-age population for Africans was 34.7%. There was tremendous increase in

school enrolment after independence. The primary school enrolment quadrupled between 1963 and 1983.

In their quest to provide education to the Africans regional disparities occurred. Indeed regional differentiation ensued as a result of uneven capitalist development in Kenya in the period between 1900 and 1952. The core region was the large-scale farming estates and urban the-commercial sector. More so, schooling opportunities were provided for the Europeans and Asians by the colonial state (Kinyanjui: 1977). The second region by then was predominantly of agro-pastoral economy comprising, Kiambu, Muranga, Nyeri, Bungoma, Kakamega, Kisumu, Kisii, and Machakos. Africans in these areas provided labour for the Europeans and through missionary activities they also gained influence on education. The third region comprised of nomadic pastoral areas, which included Kajiado, Narok, Samburu, Baringo, West Pokot, and Turkana. These areas were refused participation in the colonial labour market. In this case, they could not compete with European ranchers and livestock breeders who had taken a great part of their rangeland (Kinyangi:1980). The colonial state also maintained this situation by demarcating reserves for the pastoral people, putting their areas under permanent quarantine regulation and strictly restricting the movement of the people and livestock in these districts. Africans from the other districts/Counties were not even allowed to enter into these districts unless they had permission and a pass from the colonial administration.

Introduction of formal education therefore, among the nomadic pastoralists has been a slow process as they were pushed into semi-arid so-called native reserves and interaction with other communities was restricted. Even their contact with the missionaries and the government was marginal (Kinyanjui, 1974), and therefore had nothing to respond to, as they remained closed in the reserves. (King, 1981). Most of the nomadic districts were referred to as “closed districts”. They remained outside the sphere of influence of the settlers, missionaries and the colonial government. In other words the colonialist did not see the need of spreading education to these districts. Since these groups were pushed to low potential land, the settlers did not aspire to their land. The missionaries too did not see it necessary to occupy their attention on them since these people were widely scattered, (Kinyanjui, 1977).

The participation in primary school, then remained low in nomadic pastoral areas. For example, in 1994 Gross Enrolment Rate (GER) was 33%, 25%, 44% and 28% in Samburu, Wajir, Marsabit and Garisa, respectively while in settled area of Kiambu, Machakos, Kisii and Kakamega, it was 83%, 92%, 96% and 84.7 respectively during the same period.. (Kenya Pastoralists Forum, 1995).

Several studies had tried to explain the reasons behind low school enrolment in nomadic regions in Kenya. Nkinyangi (1980) blamed their economic inability to meet education costs. Gorham (1978, blamed the mobile nature of the Maasai while Ayot (1979) attributed it to long distances between schools and settlements. Roy (1984) further attributed it to the rigid nature of the formal/conventional education system because the system required a single point entry, sequential progression, and it is full time. This study looked at several factors together and correlated them in order.

3. Objectives of the study

The general objective of this study was to determine factors that affected access to basic formal education among the nomadic pastoralists specifically among the Samburu and to establish whether the different agro-ecological zones and regions vis-à-vis Urban, Lowland-Rural and Highland-Rural impact differently on access to basic formal education among the Samburu

The contribution of this study was envisaged to fill the gap of limited researches that have been carried out in northern Kenya in relation to the socio-economic factors examined in this study, such as distance, mobility, guardians' occupations and education levels, and more importantly, the agro-ecological zones. The study too was thought to be of useful theoretical contribution on the hypothesized relationships between the factors that affected access to basic education among the nomadic pastoralists of northern Kenya.

4. Methodology

The study took place in Samburu County in north Kenya. The County is situated south of Lake Turkana and is about 355 kilometres north of Nairobi. It is mainly arid and semi-arid and

supports predominantly nomadic pastoralism. Rainfall is erratic and varies significantly.. Water is scarce both for livestock and domestic use. The Samburu ethnic group form 76% of the population and inhabit over 90% of the territory.

The study aimed at establishing 'accessibility' of nomadic pastoralists (target population) to basic formal education. That is their 'possibility' of enrolling and retaining their children in school. In the study, this was measured by Gross Enrolment Rate, which is the total number of children in primary school as a ratio of the total number of children of school going age (6-14 years). Accordingly, the household was taken as the unit of analysis. The sample size for the study was 200. Proportional Stratified sampling was used to divide the area into three clusters, namely; - Highland-Rural, Lowland-Rural and Urban. To allocate respondents to each stratum stratified sampling was used. With this procedure, the number of items selected from each stratum is proportional to the size of the stratum in the population as shown. Further, Multi-stage sampling was used with random sampling to select from each cluster, one division, one location, one sub-location, and all households from all the villages in the sub-location.

The study used questionnaires to get information from the 200 respondents and the data were analysed using both descriptive and inferential statistical tools. The statistical package for social sciences (SPSS) was used to aid data analysis, organization, presentation and interpretation.

5. Hypotheses

The study sought to test the following hypotheses;

H1. Facility specific factors, (such as monetary and opportunity cost of education, distance to school), affected access to basic formal education among the nomadic pastoralists. In that, the higher the cost and the longer the distance, the less likelihood those children will enrol and remain in school.

H2. Background factors, (such as sex of the child, domestic work done by children, mobility of the household, perceived importance of formal education by parents/guardians, occupation of guardian, guardian's education, parental participation in school matters), influenced access to basic formal education of children in Samburu. That is, parents tend to prefer sending boys to school than girls thus reducing the accessibility of girl children to school; the more children engage in domestic work such as herding and household chores, the more they are unlikely to enrol in school and the more they drop-out of school; the more parents/guardians view education as important, the more likely they are to enrol children in school; parents in regular monetary paid employment plus those others who are accessible to money, tended to send children to school more than those in traditional occupations like herding; the more the years of formal education parents/guardians have, the more the probability that they would enrol children in school; and the less parents participated in school matters the less they take children to school;

H3. Agro-ecological zones and regions impact differently on access to basic formal education among the nomadic pastoral people. That is, those in Urban are more likely to enrol in school than those in Highland-Rural and Lowland-Rural. The same applies to those in Highland-Rural in respect to those in Lowland-Rural.

6. Overview of data collected

Two hundred Respondents were interviewed – 58 from Urban, 50 from Highland Rural and 92 from Lowland Rural. Female were 130 (65%) and 70 (35%) were male. This was because most of the men were out 'herding' and majority of them had more than one wife (making women to be the heads of the other households). The majority, (77.5%) of the respondents were married with 13.5% widows, 7% single, 1.5% divorced and 0.5% separated. The majority, 82.5% of respondents had no formal education with the highest number being in the Lowland Rural (94.5%) followed by Urban (77.6%) and 66.0% in the Highland Rural. This scenario shaded some light on the regional disparities in educational attainment even among adults. Indeed, the latter finding reflects the education level of most of the Arid and Semi-Arid Kenyan population.

The variable occupation in this study was used to shade some light on the occupations of the head of the household. Since occupation determines whether or not an individual has a regular income, it was assumed that an individual's occupation status influenced his/her children accessibility to basic formal education. The findings revealed that main occupation was herding 40.5%. The others were 'No occupation' 22%, Crop farming 21.5%, Casual work 11.5% and lastly

employment 4.5%. The findings further revealed the regional differences in occupation. The main occupation in the Highland Rural was farming 86%, herding in Lowland-rural -80.4%, while 'no occupation'- 41.4% and Urban casual work-36.2%. The latter finding confirmed the problem of unemployment in Kenya and concurred with the assertion in the Kenya Development Plan documentation (1997) that over three million people were unemployed. Finally, the study revealed that majority (88.9) of those employed were in the Urban.

The age of respondents ranged between 18 to 68 years with a mean of 37.9 years and mode 35 years. These findings reflected the statistical fact that Kenya is composed of a youthful population (Republic of Kenya 1989). The study further showed that most (53%) of the respondents fell under the income bracket of Ksh. 0-1000 per month.

The majority of those with children in school were from Highland Rural (86%), followed by Urban (70.7%). By contrast, it was the majority (82.6%) of the Lowland Rural respondents who did not have children in school. However, generally the number of those with and without children in school were equal in number at 50% each.

The total number of children in school (standard 1-8) within the respondents' families were 268 (161 boys and 107 girls). Of the 268 children enrolled in school 50% were from Urban, 39.2% from Highland-Rural and 10.8% from Lowland-Rural. Urban had the highest number of girls in school (53.3%). The level of awareness could have probably explained this difference. The total number of school going age children was 598, (29.8%) in the Highland-Rural, 34.4% in Lowland-Rural and 35.8% in Urban. The Gross Enrolment Rate (GER) therefore, is computed by taking the total number of children in school (irrespective of age) divided by the total number of school going age children (6-14 years) multiplied by 100. This figure of 44.8% showed that access to basic formal education among the nomadic pastoral Samburu was still low, compared to the National average of 84% (Abagi and Olweya: 1999)

7. Results and discussion

Facility specific factors included distance and cost. Distance was measured in Kilometers (between home and school). The mean distance covered, as per the table below was 3.0 kilometres- one way with maximum being 6km. It was revealed that 42.2% of the respondents were within the 3 kilometers ideal distance while majority (57.8%) were far from school.

Monetary and opportunity costs seemed to have been a critical factor in determining school access as it determined 48.4% of school drop-out and 48.4% enrolment (51.7%). This outcome agrees with that of Mbilinyi (1969), who found out that 77% of Urban respondents cited cost of education as one of the reasons for not enrolling children (and especially girls) in school. The table 1 below shows that 54% of the respondents mentioned that cost affected schooling.

Table 1 Frequency Distribution of cost of schooling

Rating of Cost	Frequency n=100	Percentage
Low Cost	46	46.0
High Cost	54	54.0
	100	100.0

Further, the study sought to establish whether gender bias against the girl child 'existed', ascertain its level and find out how it affected access to basic formal education. In comparison with the total number of school going age children (6-14 years) in each region, 59.6% of the boys were in school while girls were 40.4%.

Looking at child sex preference in school enrolment, the majority (69.5%), of the respondents preferred boys, 11.5% preferred girls, and 16.5% were undecided as shown in the table 2 below.

Table 2 Choice between boy or girl

	Highland Rural		Lowland Rural		Urban		Total	
	f	%	f	%	f	%	f	%
Send boys	27	46.6	39	78	73	79.3	139	69.5
Send girls	15	25.9	4	8	4	4.3	23	11.5
Undecided	16	27.9	7	14	10	10.9	33	16.5
Send both	-	-	-	-	5	5.4	5	2.5
Total	58	100	50	100	92	100	200	100

To find the reasons for preference of boys over girls, all Urban respondents mentioned that education of girls is important, therefore only the two rural regions gave reasons, Of the total number of respondents, 65.3% of the Lowland-Rural and 33.3% of the Highland-Rural respondents asserted that girls become pregnant when they go to school because they lose cultural moral values. Generally, 61.8% also gave the same reason. Other reasons were cost (12.7%), girls get married and therefore, not benefit their parents (20.0%), and (5.5%) viewed the educating of girls as wastage of resources.

They were asked whether they participated in school matters. Of the total who answered the question (n=110), the majority (90.9%) said that they participated, and only 9.1% said 'No'. The participation of Lowland-Rural was lower (at only 9.1%) than that of Highland-rural (90.9% and Urban (95.1%). This could have been explained by the hardship area they were in which forces them to be away herding and watering livestock.

Most of them (95.5%) agreed that education was important. Also, 100% of the Urban and Highland Rural respondents said that it was good to send a child to school, but 1.5% of the Lowland-Rural said that it was not good

Too, 50.5% had changed residence over the previous eight years, while 49.5% had not. According to the table below, very few of the Urban (5.2%) and Highland-Rural (12%) had changed residence. However, 100% of the Lowland-Rural household had changed residence. This among other factors could have probably explained the low enrollment in the Lowland-rural region. The highland-rural respondents were relatively settled.

Table 3 Change of residence

	Highland Rural		Lowland Rural		Urban		Total	
	f	%	f	%	f	%	f	%
Yes	6	12	92	100	3	5.2	101	50.5
No	44	88	-	-	55	94.8	99	49.5
Total	50	100	92	100	58	100	200	100

In total 93.3% of the respondents who had livestock cited livestock movements out of the homes for long periods to seek pastures and water, but 6.7% said that their livestock did not move. All (100%) of the Lowland-Rural respondents and 95.7% of the Highland-Rural affirmed livestock movements. Too, 100% of the Lowland-Rural respondents said that movements of livestock affected negatively the enrollment of children in school- since parents needed the children to help in looking after the animals. With the Highland-Rural 86% said it did not affect, while 14% said it affects. Majority (92%) of the Urban respondents said it did not, while 8% said it did.

The major activities in general were herding (45%), followed by household work (24.5%), then 'no activity' (17%) and finally farm work (13.5%). On enrolment, a greater percentage (72%), of the Highland-Rural respondents asserted that domestic work affected the enrolment of children in school, as did 62% of Urban and 91% Lowland Rural. Urban respondents mentioned 'caring for siblings' and watching over the house as the main domestic (household) activities that inhibited children from being enrolled in school. They asserted that there was high house breakage within the area and also the environment was not friendly.

Majority, (54.5%) of those without formal education, had no children in school. On the other hand, 100% with nursery, 69.6% with primary, 50% with secondary and 100% with college level

of education had children in school. In addition, of the 100 respondents with no children in school, 90% (n=90) had no formal education. This agreed with Wallace (1973) who found out that the education of parents influenced access of their children to school.

All, (100%) of those employed had their children in school, followed by casual workers (87%), crop farmers (83.7%), and herders (28.3%). These variations may have been explained by the findings of Wallace (1973) and Chege (1983) that argued that guardians' occupation influenced children's access to school. The findings therefore, showed that, the GER for Urban is 62.6%, and 59% for Highland-Rural, while for the Lowland-Rural, was 14%. These figures showed some variations. Urban was leading, followed by Highland-Rural closely while the Lowland-Rural figure was unproportionately too low. The findings therefore, already affirmed the existence of regional differences in access to basic formal education in Samburu. A further analysis was done statistically as follows;

The chi square analysis revealed that distance and cost had influence on access to basic formal education in Samburu. Distance to school was strongly associated with access to basic formal education as indicated by the value of C (0.76). the relationship between the cost of education and access to basic formal education can also be said to be moderately weak as reflected by the contingency coefficient value of (0.60) more details on the direction and strength of the relationship is aptly captured in the regression.

Further, guardian education, mobility, guardian occupation, participation in school activities and domestic work significantly influenced accessibility to basic formal education. Only gender and perceived importance of education was found not to have had significant influence on access to basic formal education.

Agro-ecological zones significantly influenced access to basic formal education. The association was found to be significant at 100% confidence level. This suggested inter alia that regional differences played a significant role in determining access to basic formal education in Samburu.

Too, Multiple regression analysis was also used to understand the linear relationship between the predictor variables, while taking into consideration the interactions among the independent variables. The partial regression coefficient of -0.58 of distance showed that it was the most predictor variable. This was followed by mobility (-0.54), domestic work (0.46), cost (0.32), agro-ecological zones (0.26), gender (-0.25), guardian education (0.21), guardian occupation (0.13), participation, (0.12), and importance of education (0.10).

Correlation analysis was further used to test the degree of relationship, between two variables. Distance to school rated first with a correlation coefficient of -0.8556 as strongly associated negatively with access to basic formal education among the Samburu. Cost rated second with a correlation coefficient of -0.7808 followed by domestic work (-0.6315), mobility (-0.5157), agro-ecological/region ($+0.4519$), Guardian education ($+0.4144$), parental participation ($+0.2767$), perceived importance of education ($+0.0959$) and lastly, Gender ($+0.0320$).

8. Conclusion and recommendations

The results of the study revealed that the association between distance to the nearest school and accesses to basic formal education was very strong as indicated by the value of contingency coefficient (0.76) and very significant statistically. More so, the correlation analysis revealed that distance to school rated first in association with access at correlation coefficient of -0.8556 . This implied that deliberate provision of more schools closer to the people and/or promotion of alternative education opportunities were likely to increase access to basic formal education in nomadic pastoral areas of northern Kenya. Likewise, the association between monetary and opportunity cost of education and access to basic formal education was found to be statistically significant at 100% confidence level. The net regression coefficient revealed that access to basic formal education was -0.32 units for each unit increase in cost of education. In addition in correlation analysis cost was the second 'strongest' factor associated with access after distance with a coefficient value of -0.7808 . This implied that the higher the opportunity cost of education among nomadic pastoralists the less access to basic formal education.

Domestic work was the best predictor of access to basic formal education. The partial regression coefficient revealed that a unit increase in domestic work reduced access to basic formal education by -0.46 units. The chi-square (X^2) analysis depicted that the relationship between

domestic work and access to basic formal education was very significant, but weak as indicated by the value of contingency coefficient (0.53). In addition, correlation analysis supported this finding by revealing that domestic work was strongly associated with access at an inverse relationship of coefficient -.6315.

The study also revealed that the relationship between mobility and access to basic formal education was very significant at the study's confidence level of 95%. The net regression coefficient showed that access to basic formal education is -0.54 units for each unit increase in mobility. In addition, the correlation analysis showed a strong inverse relationship of coefficient -.515 between access to basic education and mobility. This suggested that mobility reduce access to basic formal education among the Samburu. This could have been probably explained by the fact that households that moved from one area to another tended to increase the distance from the nearest school – hence making this facility inaccessible.

Like-wise, gender appeared was the third best predictor of access to basic formal education. The partial regression coefficient depicted that access to basic formal education was -.25 units for each unit increase in gender. This implied that the Samburu preferred to take boys to school than girls. The study found out that there were more boys than girls enrolled in primary school.

It was also found out that guardian education played a very important role in enhancing access to basic formal education. Further, guardian occupation is reflected to be the fifth best determinant of access to basic formal education. Too, the association between access to basic formal education was 0.12 and 0.01 units for each unit increase in participation and importance of education respectively. Finally, the results showed that region explained 20% of the variation in access to basic formal education as indicated by the value of R square (R²) in the linear regression model developed for this hypothesis. Indeed, the Beta weight revealed that region as a good predictor of access to basic formal education in Samburu.

Drawing from the results of the research, the study recommended that more schools needed to be availed to the pastoralists and make formal education more responsive to the mobile nature of the pastoralist. Too, a multi-faceted approach in the development of nomadic pastoralists' areas needs to be adapted. That is, by focusing on the provision of water, medical facilities, infrastructural development, and enhancing the capacities for diversification of livelihoods. Too, differentials in agro-ecological zones needed to be taken consideration of.

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