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Geographical Barriers to Education: Assessing the Impact of Distance on Access to Alternative Approaches to Basic Education Centres in Samburu County, Kenya

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ABSTRACT
This study examined the distance covered by learners to access AABE centres in Samburu County. AABE was introduced by the Kenya Government, religious entities and non-governmental organisations (NGOs) with the aim of promoting access to basic education and enhancing Universal Primary Education for all (UPE). However, school enrolment and literacy levels in Samburu have been low, at (44%) and (12%) respectively, raising the need to examine the success of AABE in meeting the envisaged purpose. The study tested one hypothesis, namely, distance covered in Samburu County. The study applied a survey research design and collected data from both primary and secondary sources. Three structured questionnaires were used for 400 learners' household heads and 56 teachers in charge of the 56 AABE Centres and 10 AABE providers. Secondary data were obtained from the Ministry of Education offices, AABE Centres, libraries and the internet. A stratified random sampling technique was used to sample the 400 respondents. Data was presented using frequency tabulations, chi-square, multiple regressions and correlation analyses. The findings showed that the distance between home and AABE Centres was found to be an average distance of 2.8 kilometres against the ideal 2.5 km as suggested by the respondents, of whom the majority (62.7%) lived beyond 2.5 km. The study recommended that more studies be done on the viability of AABE in other nomadic pastoral areas and encompass other variables.

Key terms: AABE centres, distance covered, learners, Samburu County, universal primary education.

INTRODUCTION

This research was envisaged to provide a database for understanding the factors influencing the viability of Alternative Approaches to Basic Education in Samburu County and, by extension, in other nomadic pastoralist areas. Such an attempt has not hitherto been instituted in Samburu County. This study, therefore, fills the gap in knowledge on this vital topic. In addition, the government and development agencies have tried for a long time to promote access to basic education in disadvantaged environments through approaches such as AABE. However, as indicated earlier, school enrolment and literacy levels are still low. In this respect, this study will be timely in trying to establish and rank the factors impairing the viability of AABE. Moreover, much of the documentation done on AABE has been mainly NGOs programmatic evaluations of NFE programmes and workshop reports. Little research has been done, especially so in the context of nomadic pastoralists.

The study, therefore, will fill this gap by endeavouring to give an empirically established understanding of the factors influencing the viability of AABE in nomadic pastoralist areas. It will make a useful theoretical contribution to the hypothesised relationships between the factors affecting the viability of AABE in the nomadic pastoralist Samburu area in particular and in Kenya in general. The results will be useful to AABE providers such as NGOs, the government, and religious entities, as well as to target communities and academicians. They envisage helping these stakeholders redefine their strategies in order to make their efforts effective, efficient, and impactful. In the long term, it is hoped that the study will enhance access to basic education in the nomadic pastoralists' communities and, thus, the realisation of UPE.

LITERATURE REVIEW

The use of Alternative Basic Education makes it possible to enhance students' completion rate by minimising the number of dropouts, creating safe school conditions and improving educational achievements (Bishop, 1989; World Bank, 1995, 2001). Alternative basic education is, of course, basically based on the same principle of all public education- the principle that all children should be given the opportunity to learn. Like many developing countries of the world, Kenya has also committed itself to education for all, which was declared in 1990 and reaffirmed in the Dakar Framework for Action 2000.

The study on NFE in Urban Kenya (op. cit.) revealed that the early initiatives on alternative forms of learning were started before 1980 in Mombasa. Between 1990 and 1994, the efforts to provide alternative educational opportunities were intensified, as the following table indicates: In the early 1990s, the Kenya Ministry of Education set up a non-formal education desk. Since then, the desk has been upgraded to a non–formal education unit. The MOE&ST, with bilateral partners, has formulated draft policy guidelines on NFE, which are currently being discussed with a view to finalising them. Significant progress has been made in the area of partnership and collaboration. MOE, GTZ, United Nations Children's Fund (UNICEF), Canadian International Development Agency (CIDA), Ministry of Labour through the Department of Adult Education, NGOs, CBOs, Universities and print media have collaborated to influence policy with regard to AABE and NFE through capacity building, research and analysis of successful experiences. The Maralal Stakeholders Forum in March 2000 examined NFE and AABE in Kenya (Nzomo *et al*., 2000).

The Samburu Nomadic Pastoralists

Samburu are a nomadic people who inhabit Northern Kenya, which constitute Kenya's Arid and Semi-arid lands (ASALs.) Their occupation is cattle keeping: they also keep goats and camels. However, some Samburu people do crop farming in some parts of their land where rainfall levels are a bit high, such as Lorroki plateau.

Literature on the Viability of AABE

According to the Oxford Advanced Learners Dictionary, viability means the capacity of living, or being distributed, over wide geographical limits; the capacity of living after birth/inception; the capability of normal growth and development; the capability to become practical and useful. In the present study, viability was taken to mean the success of AABE as measured by Participation in AABE, Growth of AABE, Sustainability of AABE and Quality of AABE. Participation issues included enrollment, class attendance, and consistency of classes taking place. Growth meant geographical coverage, enrollment as a

percentage of out-of-school children, and average new centres per year. Sustainability is related to the continuity and survival of AABE Centres. Quality meant competencies of learners in their respective levels. The study viewed these indicators as being influenced by government policy on AABE, resource input, community perception, the approaches (delivery methods), distance of learning centres from the living places of the learners and the nomadic lifestyle of the pastoralists.

This literature review explored several existing studies, especially on factors affecting the viability of AABE. Most studies, however, have dwelt on the weaknesses of formal education to justify the need for AABE, but the present study tried to decipher information from the few that studied AABE.

Distance and Viability of AABE

Multon (2001) also identified distance to NFE Centres as a challenge limiting access to the participation of children in schooling, whether formal or non-formal, is distance. Children in rural areas walk long distances and lose valuable time in walking that could otherwise be spent helping at home. In the process, some get discouraged and abandon learning altogether.

A study in the North Shoa (Oromia) region of Ethiopia revealed that improving physical access to schools through the provision of ABECs motivated parents to send their children to centres and created education opportunities for the disadvantaged segment of society, including girls. The study also showed that the program carried out in the zone contributes to the achievement of UPE in terms of creating access, gender equity, and efficiency (Geleta, 2010).

METHODOLOGY

This study was undertaken in Samburu County. The county covers an area of 20,826 sq Km (3.6% of the total area of Kenya). The county was divided into three districts/constituencies, namely, Samburu East, Samburu North and Samburu West. It bordered the counties of Turkana to the North West, Baringo to the South West, Marsabit to the East, and Laikipia and Isiolo to the South and East, respectively. A larger part (75%) is arid and semi-arid. The county lies on the north interface, between the lowlands and the highlands. The main part of the county is lowland with few high potential pockets, namely, Lorroki Plateau, Nyiro and Ndoto Mountains and Matthew's Ranges. Lorroki Plateau supports some crop farming, and the people living on it have started settling semi-permanently. Because of its climatic conditions, the county predominantly supported nomadic pastoralism. The research work used both primary and secondary data. The researcher visited all the AABE Centres, sponsors, and government offices between February and June 2011 to understand more about the study area and to collect secondary data. A second visit to all AABE Centres was made in October 2012 to map out the areas and identify logistic dynamics.

There were a total of 76 teachers in the 56 AABE Centres. The following table 1 shows the population and sample.

Table 1: Population and Sample

	Total	Sample
AABE Centres	56	56
AABE Learners	2012	400
AABE Teachers	76	56
AABE Sponsors	10	10

The primary and additional secondary data were collected from December 2011 and completed in January 2012. Primary data was collected concurrently in all the AABE Centres. The data were collected using three structured questionnaires targeting household heads, teachers and sponsors. Secondary data were obtained by perusing various literary documents from libraries, the internet, and Ministry of Education offices in Nairobi at the county level and at the AABE Centres. This was on policy issues, enrolment,

curriculum, supervision, assessment, staffing, funding, providers and their involvement in running the Centres.

FINDINGS AND DISCUSSION

Distribution of Respondents by Level of Education

The distribution of the respondents by their level of education is aptly captured in Table 2 below.

Table 2: Respondents' Level of Education

Level of education	f	%
No education	356	89.0
Nursery	4	1.0
Primary	34	8.5
Secondary	4	1.0
College	2	0.5
Total	**400**	**100**

In Table 2 above, the data on the level of education depicts that the majority of the respondents (89%) had no formal education- that is, they had never been enrolled in school. This finding agreed with the current statistics of illiteracy levels in Samburu County, which stands at (84%) according to the adult education department's records. The difference of (5%) was explained by the consideration of all inhabitants of the county, including the business community in the urban centres who were not nomadic pastoralists. The high level of illiteracy influences the participation of the Samburu community in AABE programmes in that the majority find life running fine for them without formal education. Therefore, they have no motivation to get involved by enrolling their children on the programmes, which in many cases bear no relationship to their lifestyle and economic mainstay of nomadic herding (BEA-E, 2008).

Distribution of Respondents by Occupation

Table 3 below shows the respondents' occupations.

Table 3: Occupations of Respondents

Occupation	Lowland Rural	
	f	%
No occupation/unemployed	38	9.5
Crop farmer	57	14.25
Employed	0	0
Casual	0	0
Livestock keeping	305	76.25
Total	**400**	**100**

According to Table 3 above, the findings indicate that (76.25%) of the respondents were pastoralists keeping livestock as a source of their livelihood. This is explained by the fact that the Samburu people have traditionally been livestock keepers for centuries as dictated by the nature of their land, which is mainly suitable for pastoralism. The table also shows that crop farmers were (14.25%). This group, too, keeps livestock but started diversifying their livelihood sources by adopting crop farming.

None of the respondents indicated that they engaged in any employment or in casual work for income. A few (9.5%) indicated that they had 'no work' as their occupation. 'No work' was not included in the questionnaire but was brought in by the respondents. These were people who lost livestock and were not undertaking any activity except begging and giving out their children to herd other people's livestock (not for payment), for them just to get food.

Distribution of Respondents by Age

In Table 4, the analysis of the distribution of respondents by gender is presented.

Table 4: Age Distribution by Gender

Years	Male		Female		Total	
	f	%	f	%	f	%
15 to 25	0	0	12	4.4	12	3.0
25 to 35	15	11.7	67	24.6	82	20.5
35 to 45	56	43.8	122	44.9	178	44.5
45 to 55	47	36.7	61	22.4	108	27
55 to 65	10	7,8	10	3.7	20	5
Total	128	100	272	100	400	100

The age of respondents ranged between 15 to 65 years. The mean age for male respondents was 44.1 years, and for women, it was 39.6 years. The average age was 41 years. According to Table 4.5, the majority (65%) of the respondents were between the ages of 25 and 45 years. These findings reflected the statistical fact that Kenya is composed of a youthful population (Republic of Kenya 1989). The majority (73.9%) of the female respondents fell below the age of 45 years, while the majority of the males (85%) were above 35 years. The lower age brackets of women than of men could be explained by the fact that most of the men were polygamous and, therefore, had other younger wives who became heads of their respective households.

The above data where majority (73.9%) of the female respondents were 45 years and below showed that their children were not adults but young and youthful, which implied that, at their age they had missed opportunities for formal education.

Distribution of Respondents by Level of Income

The study findings show that most (74%) of the respondents fell under the income bracket of Ksh. 0-1000 per month. Further, (11%) fell between 1001-2000, 2% between 1000-2999, (2 %) between 6000-6999, and none also between the income brackets of 7001-8000, 8001-9000, and 9001-10000, and (0.5%), fell under that of 10001 and above. The latter (0.5%) under the income bracket of above 10001 was explained by their involvement in the livestock business. This income scenario showed that poverty was entrenched in Kenyan society. According to the Poverty Reduction Strategy Paper 2001, the absolute poverty line in 1997 was Ksh.1239 per person per month and Ksh.2648, respectively, for rural and urban areas. More significantly, the results of this study revealed that (85%) of the respondents were below the poverty line of $1 per day (Ksh2500/- per month)

Respondent's Enrolment of their Children in School

Table 5: Respondents Enrollment and Non-Enrolment of Their Children in School

	Total	
	f	%
No. with a child not in school	200	50.
No. with children in AABE	400	100
No. with a child in formal school	200	50

Table 5 above showed how respondents enrolled or did not enroll their children in school. The findings indicated that (50%) of the respondents had at least one child in formal primary school, while (50%) did not. Also (100%) of the respondents have at least one child in AABE. This is explained by the fact that this research focused on respondents with learners in AABE. The study confirmed the actual situation on the ground.

According to Ministry of Education statistics, (52%) of children were not enrolled in primary school in Samburu County.

The study sought to establish the effect of distance between home and the AABE Centres on AABE enrollment and attendance. Distance was measured in Kilometers (between home and AABE Centres). The mean distance covered, as per the table below was 2.8 kilometres- one way, as shown in the table below.

Table 6: Distance between Home and AABE Centres in kilometers

	Average Km	Minimum km	Maximum km
General Mean	2.8	0.1	12

The minimum distance between home and AABE Centres was 0.1 kilometres, while the maximum was 12. The mean was 2.8 kilometres, which was slightly above the distance respondents gave, which was ideal, 2.5 kilometres. According to the respondents, the longer distance between home and AABE Centres reduced the participation of children aged 10 years and below. The respondents said that this was because of the presence of wild animals. This also delayed the enrolment of children in AABE until they were over 10 years old when they could dodge or run away from wild animals.

One of the studies cited in the Literature Review affirming the above scenario is that of Lentiman, Hall and Bundy (1999), carried out in Ghana. It revealed that, distance from the house to the primary school was cited as reason for late entry/delayed enrolment or failure to enroll.

Further, the respondents were asked to provide the ideal/appropriate distance between home and AABE Centres for the county. The same question was presented to education officials at Maralal. It was generally agreed that 0-2.5 kilometres were ideal (short), while more than 3 kilometres was too 'long'. The education officials mentioned that for daytime, 2.5 kilometres was fine, but for night, the ideal was 2.5. This criterion was then used in the study to measure accessibility in relation to distance. The table below shows the distance frequency distribution.

Table 7: Distance Frequency Distribution

Rating of distance covered	Frequency n=399	Per cent
Short Distance	149	37.3
Long distance	250	62.7
Total	399	100

The above table shows that (37.3%) of the respondents were within 2.5 kilometres distance and below, while the majority (62.7%) were far from AABE Centres. There are, however, variations noted in regional percentages. Although the percentage of long-distance travel for AABE Centres was not as big as that of policy, resources, mobility, and recourses, the percentage was still found to be relatively high and may affect AABE enrolment and attendance. Distance of AABE Centres from the homes of participants has an effect on their viability as it limits the capability of attendance (Ngome, 2006)

Similarly, the chi-square test was applied in investigating the relationship between distance and Viability of AABE in Samburu County and the following hypothesis was tested:

$H_1$6a There is a significant relationship between the distance covered by learners to access AABE centres and viability of AABE in Samburu County.

In Table 8, distance is related to the viability of AABE. In this case, viability to AABE is the criterion variable, while distance to AABE Centres is the predictor variable.

Table 8: Association between Distance and Viability of AABE

	DISTANCE TO AABE		
VIABILITY	Long Distance	Short distance	Row total
Viable	42 (16.8)	121 (81.2)	163 (40.9)
Not Viable	208 (83.2)	28 (18.8)	236 (59.1)
Column Total	250 (100)	149 (100.0)	399 (100.0)

Missing observation 1.
Contingency coefficient at (0.660)
X^2 = 136.476872
Significance 0.0000
df =1

Table 8 shows that the majority of the total respondents (59.1%) rated the distance to AABE to be long, while only (40.9%) rated the distance to AABE Centres to have been at least short. It also emerged from Table 5.8 that out of 250 interviewees who reported the distance to AABE to be long, only (16.8%) revealed that AABE was viable. This left those who perceived distance to AABE to be long and claimed that AABE was not viable, with the highest percentage (83.2%). As also revealed (Onwu & Agu, 2010), distance to school tended to affect accessibility to these facilities.

The relationship between distance to AABE Centres and viability of AABE was found to be very significant at (100%) confidence level. This finding suggests that distance to AABE Centres significantly influences the success of AABE in Samburu County.

Indeed, the association between distance to AABE Centres and viability of AABE was found to be somehow strong, as indicated by the value of the contingency coefficient (0.66). These statistical findings implied that the association between the two variables was not only significant but also moderately strong. The large value of the contingency coefficient (0.66) suggested that distance to AABE Centres was strongly associated with the viability of AABE in Samburu County.

In regression analysis, distance to AABE Centres was the fifth-best predictor of the viability of AABE in Samburu County. The partial regression coefficient depicted that a unit increase in distance to AABE Centres reduced the viability of AABE by –0.41 units. This implied that distance to AABE Centres reduced the viability of AABE. This finding could be explained by the fact that distance made the household worried about the safety of their children to and from the Centres. Indeed, field observation had shown that these areas were not secure enough. To be sure, cases of banditry and cattle rustling were the order of the day. More so, the children covering long distances to and from AABE Centres, as was the norm, were faced with the danger of meeting wild animals on the way.

The relationship between distance to AABE Centres and viability of AABE was found to be very significant at (100%) confidence level. This finding suggested that distance to AABE Centres significantly influenced the success of AABE in Samburu County. According to the respondents, the longer distance between home and AAABE Centres reduced the participation of children aged 10 years and below. Fentiman and Bundy (1999), in a study carried out in Ghana, affirmed the above scenario. It revealed that distance from the house to the primary school was cited as the reason for late entry/delayed enrolment or failure to enrol.

Indeed, the association between distance to AABE Centres and viability of AABE was found to be somehow strong, as indicated by the value of the contingency coefficient (0.41). These statistical findings implied that the association between the two variables was not only significant but also moderately strong. The value of the contingency coefficient (0.41) suggests that distance to AABE Centres was strongly associated with the viability of AABE in Samburu County, in tandem with the findings of Multon (2001).

Consequently, the F test for the regression equation suggested that the model was significant at (100%) confidence level. Thus, the study adopted the hypothesis, which stated that distance to AABE centres had a significant effect on the viability of AABE in Samburu County. In correlation analysis, distance to AABE Centres was rated as the fifth variable with a negative coefficient of -.3918. This meant that the longer the distance to AABE Centres, the lower the success of AABE in Samburu County. To tackle the issue of distance, it is imperative for AABE providers to make AABE interventions flexible and congruent with the lifestyle of the nomadic pastoralists of Northern Kenya (Ngome, 2006).

CONCLUSION AND RECOMMENDATIONS

Conclusions: The research established that the status of AABE in Samburu County was far below average. Various indicators were used to assess the situation. These included the participation of learners in AABE by looking at enrollment, namely the total number of children in the households, regularity of classes taking place, regularity of learners in attending classes, and dropout rate. Secondly, the growth of AABE was assessed by looking at the geographic spread and level of increase in the number of AABE centres. Thirdly, the quality of learning in AABE centres was determined by analysing the competence of learners in relation to their number of years in AABE. Fourth is sustainability, which is arrived at by analysing the continuity of AAABE centres and guaranteeing support. In assessing viability, each of the four independent variable constituents was analysed, and the average was computed. The study then revealed that out of the total children in the households, AABE's enrollment stood at (11.3%) for girls and (15%) for boys. In general, AABE's enrolment was (26.4%). In regard to out-of-school children, AABE enrolled (40.6%), leaving out a majority of (59.4%) of the children not enrolled in either AABE or formal schools. In terms of gender disparities, AABE still perpetuated the problem of formal education whereby fewer girls (28.8%) than boys (58.8%) attended. That meant that, among the out-of-school girls, the majority (71.2%) had not enrolled in AABE. It was also noted that for (39.3%) of the days, classes failed to take place. The study also showed that out of 13 weeks for each term, (60.7%) of the Centres did not function for a period of 6 weeks and below. Furthermore, (69.4%) of the learners missed classes more than half of the time. In summary, participation in AABE was found to be only (31.6%) as indicated by table 7.1. Distance between home and AABE Centres in Kilometers was found to be the fifth factor affecting the viability of AABE in Samburu County. The study established that the average distance between AABE Centres and the home was 2.8 kilometres against the ideal 2.5 km suggested by the respondents. On average, (62.7%) of the respondents lived beyond 2.5 km- that is, away from AABE Centres and therefore, rated distance as long, therefore affecting learner enrolment in AABE and also attendance of classes. The chi-square analysis revealed that the relationship between distance and the Viability of AABE in Samburu County was very significant at a (100%) confidence level and rather strong, as indicated by the value of the contingency coefficient (0.66). These statistical findings implied that the association between the two variables was not only significant but also moderately strong. The large value of the contingency coefficient (0.66) suggested that distance to AABE Centres is strongly associated with the viability of AABE in Samburu County.

Recommendations: To strengthen the existing work, it is recommended that more studies be done on the viability of AABE, especially covering other factors not included in this study. More studies on the viability of AABE are needed to document experiences in a wide range of nomadic pastoral areas. Lastly, predictor variables to AABE success are subject to change from time to time; hence, there is a need to continuously update our understanding of the changing trends of viability and the factors influencing it, especially covering new developments.

REFERENCES

Bishop, G. (1989). *Alternative Strategies for Education*. MacMillan Publisher Ltd.

Fentiman, A., Hall, A. & Bundy, D. (1999). School Enrolment Patterns in Rural Ghana: A comparative study of the impact of location, gender, age and health on children's access to basic schooling. *Comparative Education, 35*(3), 331–349.

Geleta, K. H. (2010). *The contributions and challenges of alternative basic education supported by Save the Children Denmark in North Shoa Zone of Oromia*. Addis Ababa University, School of Graduate Studies. Retrieved from: http://etd.aau.edu.et

Multon, J. (2001). *Improving education in rural areas: Guidance for rural development Specialists.* World Bank-UNICEF. Oxford University Press.

Ngome, C. (2006). *Mobile schools programme for nomadic pastoralists in Kenya: Pilot project in Wajir, Ijara and Turkana Districts*. Institute for Research and Development, Kenyata University.

Onwu, G. & Agu, A. (2010). Examining some aspects of alternative basic education programmes in Ethiopia. *Perspectives in Education, 28*(2). Retrieved from: http://www.druhslawek.com

World Bank (1991). *Letting Girls learn – Promising approach in primary and secondary education*. World Bank Publications. Retrieved from http://books.google.co.ke

World Bank. (2001). *Education for dynamic economic action plan to accelerate progress towards education for all*. Development Committee, Washington. Retrieved from http://siteresources.worldbank.org