An Empirical Investigation of Viability of Alternative Approaches to Basic Education among the Samburu Nomadic Pastoralists Of Northern Kenya

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Abstract

Alternative Approaches to Basic Education (AABE) were introduced in Kenya to promote access to basic education and to enhance Universal Primary Education (UPE). However, in Samburu County, the levels of school enrolment and literacy have been chronically low currently at 44% and 12% respectively. In order to investigate the success of AABE in Samburu County, this study tested government policy, resource-input, perception, nomadic pastoralists’ lifestyle, distance and AABE approaches applied in Samburu County. Primary data were collected using structured questionnaires for 400 learners’ household heads, 56 teachers from 56 AABE Centres and 10 AABE providers, while secondary data was obtained from the Ministry of Education offices, AABE Centres, libraries and the internet. Stratified random sampling technique was used, while descriptive and inferential statistics were employed to analyze and present the data. The study found that 92.5% of the population regarded AABE as inferior to formal education, 69.1% viewed government policy as lacking, 91.1% viewed AABE approaches as inappropriate, 80% acknowledged that nomadic lifestyle affected success of AABE, 62.7% indicated that AABE Centres were beyond the ideal 2.5 km and 73.4% said that resource input was inadequate. The study recommended for policies with a multi-faceted approach to development in nomadic pastoralist areas, addressing the problems of water, medical facilities, infrastructure, livelihoods and conflicts as a way of mitigating low enrolment and literacy levels.

Keywords: non-formal education, alternative education approaches, basic education, literacy, nomadic pastoralists.

1. Introduction

Non-formal Education (NFE), which encompasses Alternative Approaches to Basic Education (AABE), came up to remedy the inability of Formal Education (FE) to reach many children, thus failing to facilitate the progress towards realization of Universal Primary Education. Towards the close of the twentieth century, universal basic education was far from being achieved. The World Conference that met in Jomtien in 1990, pointed out that 100 million children had no access to primary schooling while more than 960 million adults were still illiterate (UNESCO, 2008). Formal Education was blamed for being oppressive (Freire, 1970), unrelated to the life and environmental circumstances of the learner and created wastage and labeling of other students as ‘drop outs’, ‘push outs’ or ‘repeaters’ (Thompson, 2001). AABE were introduced in Samburu County in 1992 but to date, its success has been doubted due to chronic low school enrolment and literacy levels at 44% and 12% respectively.

2. Alternative Approaches to Basic Education

Non-Formal Education (NFE) concept was created by a small group of propagators and nurtured early by powerful international development institutions, such as UNICEF, the World Bank and USAID [King, 1991 quoted in Etta, F 2000 p.22]: Complementary Non-Formal Education in the SAHEL: An Alternative Education System, Dakar, International Development Research Centre). By 1968, NFE gained international attention. The term was first introduced into education terminology in 1976 by Philip Coombs, and there was rapid and widespread enthusiasm for NFE in 1970s. Etta (op cit), mentioned that “although created by educational planners, the major proponents of NFE term were Coombs, Prosser and Ahmed. In 1966, Prosser had confessed a difficulty with educational terminology, and in 1973, the trio explicitly stated that they recognized that the labels: formal, informal and non-formal education are ‘imperfect labels’”. UNICEF, in 1971, commissioned the International Council for Educational Development, with Coombs as a principal actor, to undertake a major study on the subject so as to ‘provide practical policy and operational guidance’. Immediately, the World Bank also got involved, and by the late 1970s, NFE much discussed and propagated. By early 1980s, scholars tried to make conceptual definitions more clear’ (Ahmed, 1983.) NFE was claimed to be the panacea to the ills of formal education. Use of diverse approaches of Alternative Basic Education or Alternative Approaches to Basic Education (AABE) thus appeared as the solution for making it possible to enhance students’ completion rate.
through minimizing the number of dropouts by creating safe school conditions and improving educational achievements (Bishop, 1989; World Bank, 1995, 2001.)

AABE is wide-spread in Africa in countries like Nigeria, Tanzania, Sudan, Ethiopia, Uganda and Kenya. AABE programs are known in different names such as Out of School Program, Shepherd Schools, Mobile Schools, Tent Schools, and Tree-Shade Schools. Names are derived from the objectives, mode of delivery, venues or target groups. In Kenya, AABE is mainly found in Northern Kenya (among the nomadic pastoralist Samburu, Turkana and Somali peoples) and in the slums. Shepherd schools are found in Samburu County, Mobile, Madrassa and Tree-shade schools in north eastern Kenya in Garisa and Wajir areas while Undugu program operates in Nairobi slums. AABE targets mainly children and youth aged between 6 and 18 years. However, even AABE has failed to in many respects to reach out to many learners as evidenced by its low enrolment, limited geographical scale and low quality of pedagogy (Thompson, 2001.)

The Kenyan government has made numerous attempts to achieve right of access to education goal by adopting Alternative Approaches to Basic Education such as Out-of-School programmes for the youth, Mobile schools, Tent Schools and the like to address the needs of low literacy levels and primary school access in nomadic pastoralist areas. This is a response to the important need for education as an empowerment tool as well as a basic human right. Despite these educational opportunities created, many eligible school age children - aged 6-13 (about 11%) are still out of school. This is more pronounced in the ASAL. Statistical data shows that gross enrolment rate (GER) at primary school level did increase from 88.2% in 2002 to 108.9% in 2008 while Net Enrolment Rate (NER) went to 77.3% from 92.5%. Early Childhood Education Gross Enrolment stood at 62% in 2008 (MOEK, 2009.)

General improvement in GER for primary school was remarkable in the country as 21.6% and 15.2% in GER and NER respectively was realized in primary school enrolment. However, in Samburu, participation in basic education programmes do not show any improvement. Although after introduction of free primary education, 10% increase was noted in primary school enrolment, most of the pupils go for lunch only and go back home. Primary school enrolment still has not reached 50%. Many factors explain the low participation levels in Samburu. Past research established that distance to school, domestic chores, mobility, and parental occupation and level of education affect school enrolment (Ngome, 2006.) Alternative Approaches to basic education were then initiated and promoted among disadvantaged groups like nomadic pastoralists. This study thus investigated the success/viability of AABE in nomadic pastoralists areas of north Kenya with specific reference to Samburu County.

2.1 Purpose of the Study

The purpose of this study was to investigate the viability of Alternative Approaches to Basic Education in nomadic pastoralist areas of north Kenya with reference to Samburu County.

2.2 Objectives of the Study

The study had the following objectives:

1) To determine the influence of Government Policies on the viability of AABE in Samburu County.
2) To examine the relationship between resources-input in AABE Centres and viability of AABE in Samburu County.
3) To investigate the influence of Perception about AABE on its viability in Samburu County.
4) To establish the impact of nomadic pastoralists’ lifestyle on viability of AABE in Samburu County.
5) To determine the effect of Distance to AABE centres on viability of AABE in Samburu County.
6) To determine the effect of Centres’ approach on viability of AABE in Samburu County.

2.3 Hypotheses of the Study

In order to empirically meet the study objectives, this study came up with six sets of hypotheses as outlined below:

\( H_1 \) There is a significant influence of Government Policies on the viability of AABE in Samburu County.
There is a significant relationship between resources-input in AABE Centres and viability of AABE in Samburu County.

There is a significant influence of Perception about AABE on its viability in Samburu County.

Nomadic pastoralists’ lifestyle has a significant impact on the viability of AABE in Samburu County.

Distance to AABE centres has a significant effect on viability of AABE in Samburu County.

The approach used by the AABE Centres has an effect on the viability of AABE in Samburu County.

3. Methodology

3.1 Research Design

This research applied survey research design to investigate the viability of Alternative Approaches to Basic Education in Samburu County. Survey research is used to collect data, measure and explain scientific relationships and characteristics of a large population (Babbie, 1989.) It is also flexible, makes defining and measuring concepts easier, and because of standardization, is strong on reliability.

3.2 Location of the Study

This study was undertaken in Samburu County. The County covers an area of 20,826 sq Km (3.6% of total area of Kenya). A larger part (75%) is arid and semi-arid. Because of its climatic conditions, the county predominantly supports nomadic pastoralism. The area is inhabited by the Samburu nomadic pastoralists who are cousins to the Maasai. The culture and language is the same. They keep camels, cattle, sheep and goats for livelihood and social interactions. The Samburu still maintain their traditional way of life and still roam about in search of pasture and water for their livestock. AABE has been existing in the area for over twenty years.

3.3 Target Population

The target population for this study was drawn from the 56 AABE Centres in Samburu County. (See appendix 1.) The AABE Centres were taken as the unit of analysis. There were 56 AABE Centres with an enrolment of 2012 learners. Nine Centres were in pastoralist area, nine in forest area, two in agricultural area, and one each in urban, slum and agro-pastoralists areas respectively. There were a total of 76 teachers in the 56 AABE Centres.

3.4 Sample Size and Sampling Procedure

The sampling frame was all the enrolled learners in AABE Centres. The determination of sample size was through the approach based on the confidence level using Yamane sampling formula:

\[ n = \frac{N}{1 + Ne^2} \]

Where \( n \) = optimum sample size  
\( N \) = number of household in the district  
\( e \) = probability of error

In the study, \( N=1534 \) (all the learners in all the AABE centres), \( e = 5 \% \) (at 95% level of confidence.) The population of learners was 2012 in all AABE Centres. Using the above formula, a sample size of 400.44 was arrived at, and therefore, the study settled for 400. To get the sample of 400 learners who represented their households, the study applied stratified sampling technique which involved subdividing the population into a number of groups. With this procedure, the number of respondents selected from each stratum/centre was proportionate to the size of the stratum (number of learners) as shown in the following equation:

\[ \frac{\text{Total population of the stratum/AABE Centre}}{\text{Total Population (of learners)}} \times \text{Total Sample} \]
That is, each of the 56 AABE centres was allocated respondents proportionate to the respective enrollment in that centre. A list for the households represented by learners in each centre was drawn. Then, using the proportion from each centre, a comprehensive sample of 400 respondents was drawn using simple random sampling technique.

3.5 Research Instruments

The primary data were collected by use three sets of structured questionnaires. These were for learners’ household heads, AABE teachers and the other for AABE Centres’ sponsors.

3.6 Validity and Reliability of Research Instruments

There were three aspects of validity that were found to be relevant to this study, namely, construct, content, and face validity. In relation to Construct Validity which is concerned about whether the instrument measures the appropriate psychological construct (regarding an individual's psychological correctness of inference), the instruments were given to the supervisors and other educationists to check whether the questions relate to the concepts as conceptualized and operationalized. In respect to Content Validity which reflects whether the instrument adequately samples the entire domain of the content that it should cover (for example, does the school exam reflect the content taught during the term?), thorough check was done on the instruments by comparing it with the study objectives. Face Validity relates to whether the instrument appears to measure what it is supposed to measure according to the examinees, enumerators and even other untrained observers. During the validation process, the supervisors’ opinions were sought and also the instruments were given to peers and enumerators to check whether the instruments appeared appropriate. The researcher thereafter improved and moderated the instruments accordingly.

Reliability of a research instrument implies the degree of consistency of an instrument in availing same or similar results when used repeatedly (Mugenda & Mugenda, 1999, 2003.) In this research, test-retest method was used to establish the reliability of the research instruments by administering the same instrument twice to the same group of subjects, allowing a period of two weeks in-between the tests. The level of correlation between the results of the first and the second test, or the correlation coefficient, is the indicator of reliability of the instrument (Orodho, 2004.) The three research questionnaires were administered to five respondents in each category (that is, twenty Learners’ Household heads, ten AABE Teachers and four AABE sponsors) who had been selected randomly, and the results filed. After three weeks, the same questionnaires were administered to the same people in the different categories. From these results, split-half reliability coefficient (Gay, 1992) was worked out for each of the questionnaire using Spearman-Brown formula

\[
\hat{r}_{total\ test} = \frac{2\hat{r}_{split\ half}}{1 + \hat{r}_{split\ half}}
\]

The split-half reliability coefficient for the results of test-retest for each of the questionnaires were as follows:

i) Providers/Sponsors questionnaire : split-half reliability coefficient was 0.87
ii) AABE Teachers questionnaire : split-half reliability coefficient was 0.83
iii) Learners’ household heads questionnaire : split-half reliability coefficient was 0.86

According to Orodho (2004), a correlation coefficient level of over 0.75 indicates that an instrument is good enough for use in research.

3.7 Data Collection

Primary data were 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 through various literary documents in libraries, the internet, and Ministry of Education offices in Nairobi and 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.

3.8 Data Analysis

This study employed descriptive and inferential statistics in data analysis. The quantitative data collected were checked and edited by the researcher, ensuring that it was accurate, uniform and complete. The edited data were coded and transcribed in a coding sheet. With the help of the SPSS program version 17, the data were processed and presented in tabular frequency tables which were appropriately numbered and titled. The statistics applied in
the data analysis and presentation included frequencies, percentages, mean, chi-square, multiple-regression and correlation analyses. The qualitative data were categorized and described using the notes taken in the field and presented in narrative form with photos to aid explanations and understanding.

4. Results and Discussion

4.1 Policy issues

Table 1 below shows the findings of the study concerning policy-related issues in AABE in Samburu County:

<table>
<thead>
<tr>
<th>Items</th>
<th>Adequate</th>
<th>Inadequate</th>
<th>Lacking</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy Framework</td>
<td>11.2</td>
<td>19.7</td>
<td>69.1</td>
<td>100</td>
</tr>
<tr>
<td>Curriculum</td>
<td>17.4</td>
<td>24.6</td>
<td>58</td>
<td>100</td>
</tr>
<tr>
<td>Guides</td>
<td>9.3</td>
<td>20.6</td>
<td>70.1</td>
<td>100</td>
</tr>
<tr>
<td>Textbooks</td>
<td>12.4</td>
<td>19.8</td>
<td>67.8</td>
<td>100</td>
</tr>
<tr>
<td>Staffing</td>
<td>16.8</td>
<td>36.7</td>
<td>46.5</td>
<td>100</td>
</tr>
<tr>
<td>Funding</td>
<td>6.9</td>
<td>21.6</td>
<td>71.5</td>
<td>100</td>
</tr>
<tr>
<td>Assessment</td>
<td>4.4</td>
<td>9.6</td>
<td>86</td>
<td>100</td>
</tr>
<tr>
<td>Supervision</td>
<td>6.2</td>
<td>18.4</td>
<td>75.4</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>98.1</td>
<td>200.2</td>
<td>601.7</td>
<td>900</td>
</tr>
<tr>
<td>Average</td>
<td>10.9</td>
<td>22.25</td>
<td>66.85</td>
<td>100</td>
</tr>
</tbody>
</table>

Majority of the respondents held that AABE policy was to blame for inadequacy of AABE success. This concurred with many studies that had found out that Government policies were to blame for poor performance of AABE as indicated by lack of directions, coordination, resource input and funding (Owiny, 2006; Mwambili, 2004.)

4.2 Resource availability

Table 2 below revealed that the study's findings on the availability of resources in AABE facilities in Samburu County:

<table>
<thead>
<tr>
<th>Resources Availability</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adequate</td>
<td>106</td>
<td>26.6</td>
</tr>
<tr>
<td>Lacking</td>
<td>293</td>
<td>73.4</td>
</tr>
<tr>
<td>Average</td>
<td>399</td>
<td>100</td>
</tr>
</tbody>
</table>

According to the majority of the respondents (73.4%), the facilities/Resources in general were inadequate or lacking. Only 26.6% said they were adequate. According to these findings, lack of adequate resource input is responsible for ineffectiveness of AABE programmes, indicated by low enrolment and non-growth of the programmes (Huntington, 2008; Khan, 2009.)

4.3 Perception of AABE

Table 3 presents the respondents' perception about AABE when gauged against formal education.

<table>
<thead>
<tr>
<th>Perception About AABE in relation to Formal Education</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal to FE (YES)</td>
<td>30</td>
<td>7.5</td>
</tr>
<tr>
<td>Inferior to FE (NO)</td>
<td>370</td>
<td>92.5</td>
</tr>
<tr>
<td>TOTAL</td>
<td>400</td>
<td>100</td>
</tr>
</tbody>
</table>
The majority (92.5%) of the respondents viewed AABE as inferior to FE and mentioned that this perception affected participation in and therefore, viability/success of AABE. This finding agrees with several studies that had found out that AABE target communities had negative perception towards AABE. Mwambili (2004), for instance in his study in Kakamega found out that AABE was affected a lot by perception. Participation in AABE was highly dependent on the perception of the community (BEA-E, 2008; Malcom, 2009; Geleta, 2010.)

4.4 Nomadic way of life

Table 4 gave respondents' opinion on the question whether nomadic way of life affected AABE.

<table>
<thead>
<tr>
<th>Mobility</th>
<th>Herding</th>
<th>General</th>
</tr>
</thead>
<tbody>
<tr>
<td>f</td>
<td>%</td>
<td>f</td>
</tr>
<tr>
<td>YES</td>
<td>288</td>
<td>72.0</td>
</tr>
<tr>
<td>NO</td>
<td>112</td>
<td>28.0</td>
</tr>
<tr>
<td>Total</td>
<td>400</td>
<td>100</td>
</tr>
</tbody>
</table>

The analyzed data depicted that in general, nomadic pastoralists' lifestyles or way of life as represented by mobility and herding affected AABE in terms of enrolment and attendance to a high degree. The table 4 revealed that 80% of the respondents reported that it affected and only 20% said that it did not affect. This implied that viability of AABE was impaired by the nomadic pastoralists' lifestyles. Indeed, community lifestyle and the way AABE programmes respond to it has much to do with the level of success of the programmes as also supported by Ngome, 2006 and Onwu Ogu, 2010.

4.5 Distance between learners' homes and AABE centres.

The respondents and education officials were asked to tell the ideal/appropriate distance between home and AABE Centres for the County. It was generally agreed that 0-2.5 kilometers was ideal (short), while more than 3 kilometers was too ‘long’. The education officials mentioned that for day time, 3 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 distances frequency distribution.

<table>
<thead>
<tr>
<th>Distance</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short Distance</td>
<td>149</td>
<td>37.3</td>
</tr>
<tr>
<td>Long distance</td>
<td>250</td>
<td>62.7</td>
</tr>
<tr>
<td>Total</td>
<td>399</td>
<td>100</td>
</tr>
</tbody>
</table>

The findings show that 37.3% of the respondents were within 2.5 kilometers distance and below while majority (62.7%) were far from AABE Centres. There were, however, variations noted in regional percentages. Although the percentage for long distance for AABE centres was not as high as that for policy, resource allocation, mobility and perception, the percentage was still found to be relatively high and affected AABE enrolment and attendance. Distance of AABE Centres from the homes of participants was found participation in AABE (Fentiman, Hall and Bundy, 1999).

4.6 AABE Approach

Table 6 shows the respondents' view on the appropriateness of AABE approaches in Samburu County.

<table>
<thead>
<tr>
<th>Appropriateness of Approaches</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>77</td>
<td>19.3</td>
</tr>
<tr>
<td>NO</td>
<td>321</td>
<td>80.7</td>
</tr>
<tr>
<td>Total</td>
<td>398</td>
<td>100</td>
</tr>
</tbody>
</table>

The findings revealed that majority (80.7%) of the respondents held that the AABE approach in Samburu County was not appropriate. Only a minority (19.3%) asserted that the approaches were appropriate. When interrogated further, the respondents who mentioned that the approaches were appropriate gave the reason that they hardly moved with livestock and the AABE centres around them were alright if they did not move. However, the majority said that the main purpose of AABE was to rectify the weaknesses of the school-based system by moving with the children when livestock migrated. They said that most AABE Centres adopted the formal
school system approach of being static in one place, yet they did not match the expectations of the formal system in terms of quality. As noted by Benett, Moussa, Et al (2007) and Baxter, Bethke (2009), teaching-learning approaches of AABE programmes has effect on their success.

5. Conclusion and Recommendations

From the study findings, three key factors emerged as the top ones about the viability of AABE in Samburu County. Topmost was the perception about AABE. It was evident from the study that Samburu nomadic pastoralists, including parents and learners as well as the sponsors of AABE viewed it as an inferior and second-rate education. In this regard, it is up to the government to be committed in creating a conducive environment for the nomadic pastoralists to access basic education by focusing on the supply variables, and also by creating a general positive perception towards education among pastoral nomadic communities.

Government policy was blamed for lacking commitment and implementation. So, the policy implication is for the government to own up and upgrade the efforts of ensuring that nomadic pastoralist access basic education within the shortest time possible by building the positive elements of AABE into formal education. In the meantime, the government needs to take over all AABE Centres and increase their number as well as improve their quality.

AABE approach applied in Samburu County adopted the formal education system of being static/stationary. So, it is the people who go to it, not AABE going to the people. The study therefore recommended that AABE be mobile, and also that the number of centres offering it be increased.

The study, too, found out that nomadic pastoralist lifestyle of mobility and herding was a critical factor affecting viability of AABE. For this reason, schools are needed in pastoralist areas. The above can be achieved by having mobile and/or more boarding schools.

Lastly, there is need to approach the development in nomadic pastoralists areas from a multi-faceted approach. This means addressing the problems of inadequacy of water, medical facilities, infrastructure, livelihoods and the problem of conflicts.

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