

Challenges Facing Mobile Schools among Nomadic Pastoralists: A Case Study of Turkana County, Kenya

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Abstract As the universalization of primary education has become a central factor in countries' global competitiveness, nations round the world are engaging in alternative approaches for educational provision initiatives aimed at reaching the disadvantaged nomadic pastoralist groups. Among the strategies in use are mobile schools, as a Non Formal Education (NFE) approach. Mobile schools are weighed down with challenges of implementation and its graduates being integrated into the formal system of education, hence threatening its survival. This study presents the findings of a qualitative multiple case study conducted on mobile schools aimed at exploring the challenges facing provision of education to the nomadic pastoralists of Turkana County, Kenya. This study used bottom-up policy implementation theoretical approach. The findings of this study indicate that inadequate number of teachers; lack of teacher motivation; lack of community awareness and sensitization on importance of schooling; lack of food and water for both human and livestock; and unavailability of health services as the key challenges. The study recommends more teachers to be employed, teachers motivation be improved and a multifaceted approach in education provision in order to promote the sustainability of this form of education provision through mobile schools.

Keywords: *nomadic pastoralists, non-formal education, mobile schools, universalisation, bottom-up policy implementation, alternative approaches to education provision*

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1. Introduction

Varied needs of learners worldwide remain unmet in spite of global efforts to increase enrolments for several decades now. This has a long history. Clemons & Vogt, [4] noted that 875 million adults were illiterate by then and 100 million children had no access to school and untold number of youths and adults who attended school and other education programmes fell short of the required level to be considered literate in today's world standards. Moreover, going by the Global Monitoring Report [48], 113 million children worldwide were still out of school; giving a challenge to many efforts to have all children participate in education. Factoring in population growth and various attempts to change this picture indicates that this has only slightly reduced. Of this population, some are completely unable to access formal education due to its poor quality and often irrelevant curriculum to meet the needs of the learners and of their social cultural and economic development. Such are the nomadic pastoralists, who are excluded from these numbers due to the acknowledged difficulty of counting them [2]. Moreover, the lifestyle of this population seems unfavoured by the formal education system that encourages sedentary lifestyle and makes it hard for them to participate in education. This has resulted to countries changing focus to alternative modes of providing education.

Coombs' publication on the World Education crisis analysis which advocated for alternative approach to formal education marked gradual embracing of the idea of Non- Formal Education (NFE) [13]. His establishing that NFE provides faster means for community development brought about a debate on the role of NFE in addressing the needs of the marginalized and those that had not accessed education (ibid). However, the central question raised by Coombs was on what might be done through NFE to meet the minimum essential learning needs of millions of educationally deprived children and adolescents and to help accelerate social and economic developments in rural areas [13]. Such a question was and still is instrumental in regards to nomadic pastoralist children.

By the middle of 1970, non-socialist countries were turning to embrace the need for NFE in addressing the education for the masses. It was recognized as the only way that the education for illiterate masses, the neglected masses, those out of school, and also, those unable to access formal education due to their lifestyles was addressed [5]. The nomadic pastoralists qualify in these categories and hence are suitable target for NFE in addressing their participation in education. However, the Jomtien World Conference on Education for All in 1990 (EFA), sparked off a new impetus towards basic education especially with its vision and renewed commitment in making it available for all through use of alternative provision modes. Kratli [20] as cited in UNESCO [46]

asserts that, formal schooling has become a challenge; hence, millions of nomadic children remain outside the education system. The only way to reach them is through non formal education. However, little research has been done in mobile schooling as a non-formal type of education, leading to the concern on their actual participation in education.

Reaching the nomads with formal education has been a major challenge as indicated by Kratli [21], Sifuna [42], and Nkinyangi [34]. Attempts to hook them into school with interventions such as free education, school feeding programmes, introduction of boarding schools, provision of uniforms, equipping and provision of books and stationery to pupils have remained futile. Retaining them in schools is problematic and dropping out appears to be the norm. Those who did not drop out were pushed out by early marriages and migration among other factors. Consequently, enrolment of pastoralists' children in schools has been low in comparison to the number of school going children in these areas [21]. This has therefore led to growing numbers of nomadic pastoralists' children who are out of school. However, little systematic evaluation to explain the reason for this trend has been done. Therefore, this has increased the growing need to have a parallel process of enabling those outside the formal education system to have access to education [45]. With mobile schooling intervention, the need to establish the level of participation of nomadic pastoralist' children in education was crucial.

While the earth is made up of 40% Arid and Semi-Arid Lands (ASALs) which is occupied by one billion people who depend on it for their livelihoods, in Kenya, the ASALs occupy over 80% of the country and provide home for about 10 million people [37]. A total of 39 districts fall under ASALs. The habitats of these areas, who are mainly nomadic pastoralists, are among the world's poorest and most marginalized people. They therefore practice a mobile lifestyle in order to balance the water and grazing requirements of their livestock [32]. Due to this, the level of literacy is also quite low in these regions, since they are unable to attend the formal schooling.

Kenya is a country located in Eastern Africa and forms part of the horn of Africa. Introduction of formal education in Kenya by the Western Missionaries from Britain, took place in the 19th Century. However, education offered at the time was very segregative and on racial ground. Therefore, at its independence in 1963, the government of Kenya devoted itself to improved provision of educational opportunities and creating a qualified specialized human resource base as an impetus for socio-economic development [43].

Consequently, the plight of pastoralists in Kenya was first addressed in the Ominde Commission of 1964. Having been the first post independent education commission of the time, it highlighted the need for the government to address educational regional inequalities especially in the ASAL areas by gearing towards raising the levels of enrolments in these areas. It proposed among other things: - more government grants, building of boarding schools and mobile schools. In what has now become familiar as NFE provision, Kenya has a long tradition of mobile schools. The nomadic pastoralists are people who occupy the ASAL area. They depend on

livestock for livelihood and keep moving with the livestock in search for pastures and water for their animals.

The history of mobile schools in Kenya is long. Like many African countries, mobile schools were first tried out in Kenya in the 1970s, in Turkana County, with hardly any formal evaluation [22]. However, this venture was affected by the introduction of Structural Adjustment Programs (SAPs) in the late 80s which saw the introduction of cost sharing aspect in education. This policy called upon the parents and communities to finance the capital development and the costs of development of primary and secondary schools, leaving the government with mainly the payment of teachers' salaries. Therefore, these regions have suffered marginalization from the colonial times, due to the differences in responses to social economic development [43]. Moreover, at independence, provision of education in Kenya had been in favour of the agriculturally productive regions. These disparities persisted even after post independence, thereby contributing to increased inequalities in education development [15]. Consequently, a renewed focus on provision of education to these marginalized communities re-ignited in 1990s, which saw the focus on alternative provisions of education rekindled, in line with efforts of achieving education For All (EFA) goals.

Although mobile school intervention has been experimented in many countries world-wide including Mauritius, Iran, Nigeria and Mongolia, its success has been minimal except for Iran [11]. Kenya has about ninety mobile schools funded by the World Bank and Arid Lands Resource Management Project (ALRMP) in ASAL areas scattered in ten districts which include: Turkana, Wajir, Marsabit, Tana, Samburu and Ijara among others [48]. Some of them are however managed by church bodies and the Ministry of education through Free Primary Education policy. This study confirmed the following findings which are in tandem with the Ministry of Education guidelines [38]. The schools use the non-formal curriculum and use of first language for instruction as a policy. The teachers are attached to the nomadic family or group of families who are targeted for education provision. Children, who are too young, graze the animals and attend school by day and the older ones together with the adults, attend later after carrying out their family roles. The schools are supervised by County education boards. Among the ASAL regions where mobile schools have been established, Turkana has the largest number of mobile Schools. Despite this, it has persistently registered low advancement in comparison to other regions, thereby resulting to low literacy levels, hence creating interest in this location. Moreover, with the introduction of the mobile schools, a non formal type of education after the failure of formal education to reach these nomadic pastoralist groups, Turkana County has shown very low progress in improving enrolments trends in basic education. It is in the interest of Kenya as a country that education access for the pastoralist child is given a fresh look and those challenges that hinder pupils' access and participation in primary school education be identified and reinforced with haste so as to enhance the achievement of the elusive EFA goals and their sustainability. It is by taking such pragmatic efforts that the education of the ASALS will be guaranteed.

Although few studies [23,27,43] have been conducted concerning the nomadic pastoralists of Turkana County, most of them are of quantitative nature and on formal schooling, hence do not give an understanding of the status of participation levels of the nomadic pastoralists of Turkana County and the barriers to their participation in mobile schools. Little is known about the general barriers hindering the participation of nomadic pastoralists of Turkana County in education through mobile schools. Therefore, there is need to explore the prospects and challenges hindering participation of nomadic pastoralists of Turkana County in education and to analyze the strategies to counter the barriers, using qualitative approach.

Consequently, this study strived to address the following questions as a guide:-

- What is the status of nomadic pastoralists' children of Turkana County in education through mobile school?
- What are the barriers to their educational participation in mobile schools?
- What strategies should be effected to counter these barriers in order to promote their participation in education through mobile schools?

1.1. Objectives of the Study

The objectives of this study are:

- To examine the status of Turkana County's nomadic pastoralists' children participation in education through mobile schools
- To explore the challenges which hinder nomadic pastoralists children's participation in education through mobile schools
- To review and analyze the intervention strategies to control the barriers.

1.2. Research Design

This study adopted multiple case study design, of qualitative approach, in order to provide understanding of the mobile school phenomenon from its naturally occurring context [50]. He has further asserted that case studies are useful for explaining presumed causal links between variables that are "too complex" for survey or experimental designs, by describing the real-life context in a causal chain, illustrate specific constructs, and illuminate a situation when outcomes are not clear [51]. This researcher was able to derive the causes of low levels of participation of nomadic pastoralists in education by describing their real life context as nomadic pastoralists who rely on livestock as a source of livelihood. Therefore, illumination of specific aspects that have contributed to persisting failure of reaching this nomadic pastoralist group through education were integral aspects in this study. Therefore, while this multiple case design used three cases and hence deemed appropriate for this research, the outcome of the study is presumed to be informative since the researcher was able to replicate findings and test (or rule out) rival explanations, as espoused by Yin (ibid).

Casley and Kumor [3] have corroborated that qualitative research reveals behaviour patterns, social and economic processes, and environmental factors, which the informants themselves are not aware of, or are unable to

adequately describe. Hence, qualitative research methods used in the study were fundamentally relevant and suited for locating the meaning that nomadic Turkana pastoralists placed on events, processes and structures of their lives, their perceptions, assumptions, prejudices, presumptions, and for connecting these meanings to the social world around them. This was based on the assumption that it would enable this study achieve its objective of determining the barriers to participation of nomadic pastoralist children in education through mobile schools in Turkana County and establish the alternative strategies to counter the barriers. Three mobile schools were selected for the study with the aim of illuminating the issue of concern from different perspectives in addition to broadening the overall scope of the study by giving more compelling and robust evidence.

Turkana County is located in the North Western region of the country within Rift Valley province. It is approximately 77,000 km² in size and borders Uganda to the west, Sudan to the northwest and Ethiopia to the northeast. The main livelihood in the district is pastoral. The area is prone to constant cattle rustling clashes between the Turkana and their neighbours in Uganda, South Sudan and Ethiopia. As a result of this, the county suffers a lot, in terms of loss of life, loss of property, displacement of families, destruction of infrastructure e.g. schools, health and water facilities and disruption of education [36]. Turkana is also identified as one of the poorest counties with major causes of poverty being harsh topography and climatic conditions, insecurity, cattle rustling and low school enrolment (Ibid.).

Perennial droughts feature prominently in the region, a condition that forces majority of Turkana people to depend entirely on relief food provided by the government and non-governmental organizations (NGO). Coupled with the fact that this geographic region embraces traditional practices that make up the social fabric of this community, this nomadic pastoralist group does not often augur well with the strongly centralized formal school provision. Therefore, Turkana people naturally have to rely on their traditional cultural practices such as nomadism to ensure their livestock survive for the sustenance of food security of the families and children. The mainstream society in Kenya, from the assumptions of western lifestyles, considers nomadic practices as barbaric and primitive. However, pastoralist lifestyles have continued to persist even as the educated elites attempt to change Turkana from nomadism to modern lifestyles. With increasing dropout from formal schools and lack of finance to keep nomadic children in schools, education provision remains a major challenge, hence, is not the best option for survival of families as asserted by Nga'sike [31].

In general, the pastoral communities in Kenya today, are the least served by the formal education system and therefore pose a distinctive problem. The status of education in Turkana County is typical of all the ASAL counties of Kenya characterized by low enrolment levels, high dropout rates and poor infrastructural development, in spite of its having the highest number (61, according to Turkana Education Office, 2013) of mobile schools in comparison to the rest of ASAL districts. The mobile school system aims at adapting to the socio-economic lifestyle of nomadic people. It is an alternative mode of

providing education to nomadic pastoralists in ASAL areas.

The target population for this study was drawn from the total number of mobile school Centres in Turkana County which were 61 (Ministry of Education -NFE information desk, 2013). The mobile schools were taken as the units of analysis.

1.3. Data Sources and Techniques

The sampling frame included all the parents of the enrolled learners in the 61 mobile school Centres and also the teachers in the mobile schools in Turkana County (from Turkana County education office, 2013), since they were deemed information rich in relation to the objectives of the study. The researcher selected the schools purposively from two out of the six divisions of Turkana County. Maximum variation sampling was used, a non-probability sampling approach, allowing the researcher to purposively and non-randomly select a set of cases which exhibit maximal differences on the variables of interest [25,29]. Also, consistent with Creswell [10], it was thought ideal in order to display the different dimensions of mobile school phenomenon as represented by the cases falling at both ends of the continuum. The two extreme values used for sampling were high and low performing schools which were screened through the following parameters. This was based on reviewing documents and enquiring from area educational office. Thereafter, the choice was based on the number of years the school has been in existence, the distance of the school from the main road, demographic characteristics such as population size; in terms of enrolments, sustaining students through to graduation and the number of clusters that it serves, accessibility in terms of means of transport and security of the area.

This study rendered itself qualitative through the use of case study. The case study allowed the researcher to use two categories of Focus Group Discussions (FGDs) to collect data from learners in the third grade and also from their parents. This is because the third grade was the final level before transiting to join formal schools and hence was information rich. It also promoted interaction and insights that would have been less accessible without the interaction found in a group [14]. The other fieldwork approach for data collection was the use of in-depth interviews on teachers and the County education officers. This were conducted and later followed by member check to ascertain its dependability. In addition, document analysis was also used to triangulate the information gathered through the other methods. The documents included but not limited to class registers, minutes of meetings and other official documents that deemed information rich for this study and hence authentic for use in this study [41].

Finally, the researcher conducted observation to cross-check the information obtained through the interviews and focus group discussions. The researcher took a complete non- participant observer role. Once transcribing of data was carried out, systematic identifying of categories from all the data was done in relation to the objectives of the study. The categories were informed by the purpose and the theoretical prepositions of this study as Merriam [26] proposes.

1.4. Researcher Positionality

At the outset of data collection, the researcher kept a reflexive diary [16,35]. This was by addressing, examining and clarifying the specific concerns of the study, researcher's own assumptions, experiences and orientations. This was aimed at dispelling any prejudices that could impact the study. It allowed me to move beyond my initial preconception and generate the findings of my research from the words of the respondents and the context of the study. In addition, the researcher being a lady in a community that is characterized by gender roles culturally, the research assistants were from local community and were male. This helped in building trust during the actual data gathering exercise.

1.5. Dependability and Credibility

Data gathering instruments used were interviews, observations and document analyses. Credibility was established through triangulation in order to provide corroborating evidence as recommended by Merriam [26], Yin [51] and Creswell [10].

The researcher strived to enhance the dependability of the study findings, through several ways, such as, detailed field notes and the review of these field notes for accuracy by participants through member checking. The researcher also used tape recorders, photographs, participants' quotations, literal descriptions and actively sought for discrepant data or cases. This also helped obtain an accurate match between researcher's categories and interpretations and what was actually true. Thus, multiple methods of data collection used enhanced reliability and accuracy of the data obtained.

1.6. Theoretical Perspectives

To facilitate our understanding of the prospects and challenges facing NFE among nomadic pastoralists of Turkana County, bottom-up approach policy implementation Theory [17] was a helpful conceptual framework in the analysis of empirical data. It has been used in areas where there are uncertainties and lack of consensus of the best means to achieve them [44]. Examples of these are the education for the disadvantaged. The theory is important since it pays attention to the needs of the networks of actors involved in service delivery at the local area levels and in this case the mobile school needs as reflected on the ground. These actors are then asked about their goals, strategies, activities and contacts, which are incorporated in the policy formulation and implementation.

Unlike Top-Down approach which applies in cases where there is high certainty of how it will be implemented [44], the approach uses network technique to identify local, regional and eventually national actors involved in planning and execution of government and non- government programs. NFE approach to education provision should be tailored to meet clientele's needs. By involving the network of actors at the local level where the program will be implemented, it is able to respond effectively and lead to eventual effectual implementation of a policy. Having to network from the bottom upwards implies that it would be easy to identify the actors at national level and hence lay strategies and activities to be played by all networks so that the policy is implemented

effectively. Sabatier [39] argues that the advantage of this approach is that it helps establish a network of climbing from local actors at the ground level and decision makers and eventually reaches all the sectors. Establishing needs of the mobile school infrastructure therefore, would be instrumental in correcting the scenario on the ground, for effective provision of education through mobile school invention.

In addition, this theory focuses on the centrally located actors who device and implement programs, hence putting into focal point the contextual factors within the implementing environment. Teachers, learners and parents are the focal point actors in mobile school set up. This then helps establish the actual challenges facing the implementation of a policy in the perspective of policy execution as espoused by bottom-up policy implementation theory. This factor is consistent with the context of the NFE form of education which is aimed at being flexible enough to meet the needs of the clients. For instance, having to operate on a flexible school calendar for mobile school is one of the important approaches needed to meet the goals of the actors at the ground level, which is consistent with this theory. The study found out that the implementing environment requires a multifaceted approach and in some cases working together with other players in other sectors such as in health, water and livestock so that the policy may be implemented effectively. From the data collected in this study, two thematic strands emerged- actors and the implementation environment. Generally, the study concludes that the education sector on its own may not promote the sustainability of effective implementation of Non Formal Education unless they interact with other actors in the context of the implementation environment. It thus means that for any equity concerns to be addressed in the provision of education in this area, access and participation of the children in Turkana should be addressed in a deliberate policy enactment. This can only be realized through consultations with the actors at the grass root level to enable inform the actors at the top levels of management.

2. Community Ownership of the School

The study identified four actors in the implementation of mobile school program. These are learners, teachers, parents and for the local community, whereby the parents and the County Education office represent the community. In efforts to understand the challenges affecting the success of mobile schools, they were deemed information rich.

2.1. Teaching Capacity

This study identified the following conditions as having contributed to the current challenges facing mobile schools in Turkana County. The recruitment of teachers was based on the criteria that one had to be a member of the community and who is with them as they move in search of pastures. This is advantageous since learning took place in the first language, which is deemed appropriate in the early years of schooling, since it is easier than having to use a second language at this initial stage. The second condition was pegged on qualifications

for one to be a teacher. It had to be the most literate person from the cluster who is ready to offer voluntary services to the community. This study confirmed this through the teacher respondents. This study found out among the teachers involved in this study, what came out indicated that their highest academic qualification ranged from, KCPE to KCSE certificate, except for one of the schools whereby the teacher has done (Early Childhood Education) ECD certificate course. For this case, ECD certificate signifies that one is qualified for the job. Therefore, this in itself contributed to variations in the learning approaches that took place in all the schools, considering there was no form of orientation provided to them, considering that teaching is a technical activity involving a lot of dynamics.

The variations in the qualification of teachers indicate that there are no set out standard guidelines. Therefore, teachers lack the necessary training to handle students of diverse nature in terms of expected learning outcomes, as learners attend school on a flexible- time model after they are through with carrying out their family roles. Consequently, this contributes to low levels of motivation among these volunteer teachers, hence, leading to low participation levels of children in mobile schools. For instance, for the case of the school with a trained teacher, he is already mentoring the teacher to leave behind “when his time to leave comes” as he put it. Therefore, the study established that teachers were inadequate both in terms of quality and quantity, leaving the survival of mobile schools at a threat.

Teacher shortage is a major drawback to mobile schooling. This in itself has far reaching effects on the running of the schools considering the crucial role they play in these kinds of institutions. It is derived from the principle that in order for a mobile school to be established, it must have at least twenty five learners [48]. However, in consideration of the dynamics involved in this peripatetic group, where the teacher does not have a homogenous group throughout the flexible school calendar, then, the school attendance may have inconsistent numbers at different times. This may force a teacher to seek for help from among the community. In case of a teacher falling sick, the problem is even more severe. In one of the schools where the teacher had been hospitalized with her child, the school had to survive through the help of a former student who never accepted to transit to the formal school after completing the third grade. It also translates to staying without learning on some days and in addition, the extent to which such a teacher can teach in terms of depth and coverage of the subject matter is questionable.

In all the three schools involved in this study, all the teachers were quoted saying that they did recruitment of learners upon joining their respective schools. This implies that the schools were not running after the exit of their predecessors and that is why they had to do recruitment again. Perhaps during this break also, so many students may have dropped out completely, though some may have been away grazing animals as per their culture at the time. In addition, without continuous learning, the chances are that they will have forgotten what they had learnt. This will make them start learning all over again. This results to delay in learning and consequently the completion time period and completion rates are affected by such obstacles. Coupled with the community’s mobile

lifestyle, the delay causes further interruptions which prolongs the completion time, therefore, leading to low transition rates.

As document study indicates, the completion rates for the schools used in the study show that for School A, which is the most recent and has only been in existence for the last three years has a Completion Rate of 14 percent against School B which had 19 percent, yet has been in existence for the last five years. This study found out that it is the best performing school, since going by this rate, by the time it will be five years old; it will have had many more learners transitioned to formal primary school. This could be attributed to the fact that the school is still providing food to the learners and also perhaps due to the fact that the teacher in this school is trained in ECD. However, the lowest performing school has transitioned only five percent of its total enrolled learners, yet it has been in existence since year 2008. This however was attributed to the fact that provision of food by the government had been stopped temporarily, hence leading to some of the pupils dropping out from school and could also be probably due to the level of teacher qualifications which is KCPE (Kenya Certificate of Primary Education) certificate. The fact that one of the schools has a water tank also indicates that they are likely to be in one place for as long as the water is available. The teacher in School B has completed KCSE (Kenya Certificate of Secondary Education) certificate level. This explains why the school has that kind of completion rate, in spite of her having been away for some time due to a sick child.

From the interviews with all the teachers, there was no any form of examination administered to the pupils in order to certify one as having completed schooling. Therefore, transit to formal school is from individual teacher's own discretion. This confirms that no form of formal certification is provided to them upon completing the third grade. Therefore, without a specified determining criterion as a prerequisite for joining formal school, then individual teachers' discretion and subjectivity prevailed. This perhaps explains why when the pupils transit to formal schools; they are not able to stay for long before either dropping out or resuming to the mobile school. The researcher is of the opinion that in-service training of teachers and seminars would help facilitate fill this gap of capacity building to some extent and further institutionalize the operations of mobile school so that the levels of transition to formal primary schools may be improved. It may also enhance graduating learners fit in the formal schools; hence improve the level of transition to formal schools. This may help avoid cases such as with an old student (boy) of one the mobile schools, who is already helping with teaching, after having been transitioned to the formal primary school, as this study found out.

Teacher turnover is alarming. For each teacher who was interviewed, they have taken over the schools from other teachers. Given the short period that these schools have been in existence, the continuity of these schools is threatened. However, in an attempt to maintain continuity in one of the schools, the teacher is already having a support teacher whom he is coaching to take over the school from him. On being probed, he asserted that the learners need someone who will know how to handle them. He emphasizes that from his experience, it is important for a teacher to know how to teach the kind of learners that

they have. This was in reference to one of the schools used in this study. It was observed that the support teacher mainly handles the adults in the evening. Considering he is the second teacher to work in that school, whereas the school is only three and a half years old, this indicates that the rate of teacher turnover is high in mobile schools and they are de-motivated. From the enrolment trends, the school has been growing steadily as indicated by data from the document study.

In terms of qualifications, this is the teacher who has done ECD and is already preparing to leave. However, from document study, the school has been doing well since the enrolments have been increasing gradually year after year. This is evidenced as indicated: in year 2010, total enrolled in this particular school were 90, 125 students in 2011 and 137 in 2012 (data was obtained from document study). Moreover, considering that even the other teachers in the other schools used in the study had taken up the schools from others, yet the schools were established in year 2008, both schools have had two teachers before the current in a span of five years. This indicates that there is need to do further studies on what really contributes to teachers' turnover if these schools have to run smoothly. Consistent with Woldab [49], another issue that emerges from the study is the need to have investment in capacity building of the teachers so that they become more motivated to do their work. Increasing the number of teachers per school may also require attention so that when one of the teachers is away, there is another to stand in for them and in that case learning will still be going on at the very least. This is because when teachers are de-motivated, their teaching is not effective, hence it may lead to withdrawal of learners from mobile schools. Therefore, the teachers' morale needs to be increased, such that at time for exit, formal arrangements are made for handing over to enhance continuity. The voluntary aspect in itself is the cause for low motivation, hence the cause for the low participation of nomadic pastoralists children of Turkana County in education.

From the findings of this study, it was observed that as time progresses and the enrolments increase, the teacher finds the size of the class and workload overwhelming and may need the services of an assistant teacher. This was observed in two of the schools that were studied. In one of the schools, the teacher has a fourteen year old boy who helps her while she is teaching a different group by the watering point. The teaching at watering point is mainly for the bigger boys and takes place when they take animals to drink water. In this particular case, the teacher leaves the other younger children in the hands of the boy. The teacher however is quick to emphasize that the assistant teacher only handles teaching of: '...A, B, C,' (In reference to the alphabet- one of the basic elements taught in preschool), considering the boy's level of qualification.

Inadequate teacher challenge and the heterogeneity of the groups being taught at any one time in line with the dynamisms of mobile schools are problematic. As the following responses indicate, the growth of school without commensurate increased teaching force, may be risking compromising the quality of education. In one of the schools where the school register indicated a total of 375 enrolled students, on being probed on how she managed to hold such a large number of learners, she aptly explained:

But they do not come to school all at the same time. Some can be in school for two months then they go up the hills to take care of the camels. In such a case, for some I may give them homework which they do and then bring the books later. While in other instances, I know when certain families bring their livestock to the well for watering. Then I go to meet them at that particular, time.

This indicates the various approaches that the teachers take to ensure that they teach learners even when they are carrying out their duties. However, as one of the teachers in this incident indicated, having to go teach learners at the well implies that those left behind require to be with another teacher. In this case the teacher leaves them with “the boy who assists” her. The fact that this boy after completion of Grade three joined primary school, but for this particular case, stayed for only a few days and then returned to the mobile school, needs further research which is beyond the scope of this study. Such a scenario paints a grim picture of the level of inadequacy among teachers. Therefore, this study is of the opinion that monitoring and evaluation mechanisms need to be conducted regularly on the implementation of the program. Such systems can prevent compromising of the quality of teaching to a great extent and enhance their sustainability. Hence, the question of the quality of teaching should be given the critical attention it deserves.

From this study, it is also observed that teachers’ services are needed as the school grows and as time goes by, due to different levels of learners. Apart from the size of the classes and the number of shifts for the classes, the teachers may at times be unable to teach, leaving the school without anyone responsible to carry on with the classes. In one of the schools, the teacher had her child who seemed unwell. She was quoted saying this as regards her experience:

I had slept in hospital because of him for two months. I would still be in hospital. I came the day before yesterday when I heard that you were coming (in response to the field study exercise). But when I am teaching, my mother-in-law sits with him. As for when I was away, the former teacher who was here before me comes to step in for me.

Some of these sentiments expressed here show the degree of the need to address the deployment of more teachers in these schools. This is because the teachers are social beings and perhaps for some reason may be unable to attend to the school on a daily basis in this setting. For instance falling sick on the part of the teacher would mean a school may not run. Furthermore, the terms of service are not friendly and this may explain why they keep leaving. For one to give voluntary service, it implies very minimal level of commitment on the part of a teacher in case another alternative source of livelihood arises that is more attractive.

2.2. Learners and Parents in the Context of the Scholarship Environment

Apart from the issues related to the teachers, other issues that are of importance have emerged in relation to the learners’ needs that hinder them from their attending school. Food insecurity also affects participation in education as the community has to move in search of pastures and water for their animals. Since this locale of

the study persistently experiences drought and famine, then for the children to stay in school, they need to have food. Food as a basic need is still a challenge in Turkana County where majority of people depend entirely on relief food by the government and Non Governmental Organizations. As a result, if children who may be have nothing at home for food or are surviving on one meal a day only come to school and stay without taking anything as this study confirmed, effective learning is a challenge. A teacher observed:

Some walk even for seven kilometers to come to school, sending that child back home- yet may be the child had not even had breakfast; they cannot concentrate and cannot learn. Actually they cannot come to school unless they are provided with food.

The issue of food as an obstacle to schooling was raised in all the three schools. This is something that the teachers are very keen on. They normally go to the nearby primary schools where they are attached to ask for food. Apparently, all the three mobile schools that this study undertook the research on have a primary school where they are attached and this is where they are expected to transit the learners that complete the mobile school. This brings in the idea that that more funds should be allocated to the mobile schools for them to be successful in promoting education access to this nomadic pastoralist community in Turkana County. If the school is able to provide education and food, then the enrolled students will be sustained through to graduation.

Distance to school in some cases is still an issue for some of the learners depending on their age as indicated in the above observation. Considering that some girls attend school in company of their young siblings as they are meant to take care of them according to the family roles of this community, then attending school in some cases may be a challenge. Moreover, when some of the herds are taken high up into the hills, thereby leaving the weak and those with young ones behind, it is difficult to have the whole village including the school moving. In such cases only the young and the strong men and women move, making it difficult for all of them to be in school for some duration. However, when they come back they pick up from where they had left.

Culture and negative attitudes towards education within the community hinders participation of nomadic pastoralist children in education. This is attributed to the competing priorities, with children’s time being taken up by family work; either looking after livestock (especially for boys) and household chores such as fetching water and firewood and looking after young children (for girls). This can be countered by sensitizing the community more on education, as some of the parents from the school that had many adults in school recommended.

Another thing that emerged as an obstacle to attending school is sickness. For this community to access health services, they require to go for long distances and in such cases if it is the case of the mother who is unwell or a child who is unwell, then for the girl who attends school will not be able since she would have to take up some domestic responsibilities. This also implies that the children themselves if unwell would also be away from school for several days as they go to seek for medical services. In one of the learners’ FGD, one of them indicated that the things that keeps her away from school

is when she has to go and look for the lost young one of a goat and when the younger sister is sick. Still others observed they do not attend school when they have to fetch water.

This when triangulated with interviews with the teachers, one of the teachers, aptly put it:

Sickness affects school attendance very much. Two months ago when we had cholera outbreak, some people died. Even sometimes children get bitten by snakes or scorpions. But we treat such traditionally before taking them to the hospital which is very far away.

Still one of the teachers had been admitted in the nearest hospital which is slightly over 70kms. This indicates the magnitude of the problem of health facilities in the region. Hence, lack of food, water and health related issues are the main obstacles to mobile schooling as confirmed by this study.

3. Discussion of Findings

3.1. Challenges Facing Mobile Schools

The study found out that the critical condition that needs to be addressed so that the schools can survive is having a multifaceted approach to education provision. The inter-sectorial linkages with other actors, as suggested by bottom –up approach policy implementation Theory proponents [17], such as provision of food and water for both human and animals were mentioned by all the informants as a major issue that needs to be addressed. During most of the FGDs with parents, on issues pertaining challenges they experience, they recurring focus of their discussions mainly focused on issues related to food and water as key obstacles that hinder their children from attending school. Availability of a source of water was as important as pasture for animals and constituted a major consideration in the choice of where to establish kraals during the dry season. Moreover, this study found out that all the schools involved in the study were running near a water source. It was also reported that the teachers in those schools as was observed in the interviews, would at times look for the bigger boys near the watering sources at certain times of the day when they usually go to water their animal and teach them. This

confirms studies by Dyer, [12] and Ng'asike, [31] who assert that this group of people migrates as a livelihood strategy in search of water and pastures as an integral component of successful pastoralist production. Furthermore, with livestock as their main economy and the only source of livelihood of nomadic pastoralists, it is difficult for them to live in an area where there is lack of water and pasture for their animals.

This study found out that the functionality of a school was, to a great extent, dependent on the availability of water and food for those attending school. In two of the schools involved in this study, they observed that there has been a drop in enrolments due to the fact that the schools are no longer being provided with food by the government. From the findings of this study, food was previously provided to the schools by the government directly but at the time of this research, they were expected to be getting from the nearby primary schools where they are attached and where their graduates transit, to after they are through with grade three of mobile schooling. This established that the quantity of food is however provided once a month and it lasts them only one week. This is reflected in two of the mobile schools used in this study. However, since one of the schools manages to get food from donors such as the Catholic Church, then the school is able to run smoothly from morning through to the night. The school is also able to hire the services of a support teacher and a cook as an employee. This study concurs with Kratli [21] as cited in Nga'sike [31] when he argues that the Turkana value school as supplementing dependency on herding of livestock. This indicates that the nomadic pastoralists are willing and able to embrace education as an alternative route to improving their livelihood.

In corroboration with data from documents used in this study, the same scenario is prevalent. As can be seen from Table 1, the enrolment trends have been declining over the last three years in two of the schools involved in this study (school B & C) where regular provision of food has stopped. However, in school A, where the situation is different, food is still being sponsored by the church organization. Where A, B & C are identity pseudonyms of the schools used for the purpose of this study. Table 1 illustrates this.

Table 1. Gender Enrolments per School from Year 2010 to 2012

Year	School								
	School A			School B			School C		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
2010	46	44	90	45	40	85	47	43	90
2011	78	47	125	40	35	75	45	34	79
2012	87	50	137	44	29	73	30	20	50

Table 1 shows the distribution of total enrolments per school per year between years 2010 to 2012 on gender basis.

Moreover, Table 1 indicates the extent to which girls are enrolled in mobile schools in comparison to boys. The number of girls enrolled is relatively low in all the three schools used in this study in three years. For instance School A in year 2012 there were 50 girls enrolled, whereas boys in the same year were 87, reflecting that

boys were 37 more than girls. In the same school in year 2011, the girls were 47, whereas boys were 78, hence a difference of 31. In the other schools, the trend is similar. For instance, in year 2012, there were 15 boys more than girls enrolled in school B. While in School C, the total enrolled boys in the same school were more than girls by a margin of 10. These findings are similar to those of Migosi, J., Nanok, D., Ombuki, C., & Metet, J. [27] who indicated from their study that access to education was

more difficult than their than their male counterparts mainly due to cultural considerations. The choice between having a girl child in school and acquiring more wealth in form of livestock in exchange for their marriage puts the schooling for girls at stake. Hence, culture contributes to the challenge of providing education to nomadic pastoralists children.

Mobile schooling among the nomadic pastoralists of Turkana is confronted with the challenge of inadequate resources to run the institutions. These include teachers, food and water among others. To start with, the prerequisite qualifications for teachers to be hired to teach in the mobile schools are two-throng. On one hand they are the most learned from among the cluster where the school will be established and on the other hand they are expected to give voluntary services with some minimal token twice a year. Such teachers therefore, lack motivation. Without the necessary requirements to run the school such as teachers, food and water for both human and livestock, they are confronted with the threat of continued exclusion from accessing education. Moreover, due to the fact that this kind of education has not been fully embraced by the government in a way to indicate it receives the attention similar or equal to that given to formal schools, it endures isolation. With such a condition, coupled with lack of clear infrastructure in place in order to promote progressive development in education among these groups, it leaves the provision of education to these nomadic pastoralist groups threatened.

In their professional role as teachers, lack of preparedness of the teachers for the job heightens the extent of motivation. The issue of having to use teachers, who have not gone through training, have serious implications considering the peripatetic pastoral way of life. One of the main obstacles is being required to use multi-grade and multishift approaches in teaching, which may leave the teachers' level of motivation highly affected. This study established that the rate of teacher turnover is relatively high. The high rate of turnover among teachers in the mobile schools could be attributed to this to low motivation to some extent. This study established that these approaches of teaching are critical in expanding access and promoting retention of learners in mobile schools. This is consistent with Ingubu, Kindiki & Wambua [19] who point out that such approaches are equity-focused strategies which are prevalent in nomadic pastoralists' areas. However, with high rate of teacher turnover due to low motivation, such situations create low participation since the schools cannot run without teachers. In tandem with UNESCO [47], this study confirmed that even with the implementation of mobile schools among the nomadic pastoralists of Turkana County, the level of participation in school is still low, consequently, leaving the very goal of introducing mobile schools at jeopardy.

Widening access to education among Turkana Nomadic Pastoralists

As various countries world over make efforts to universalize primary education, hard-to-reach groups still exist within their countries. The introduction of various programs to provide education to the nomadic pastoralists as mentioned in this study have been aimed at making the Education For All a reality and is in tandem with other countries round the world [30,49]. Kenya seeks to make quality education access and equity a reality.

A key strategy in creating a universal access to primary education is the use of alternative approaches to education provision to reach the disadvantaged and marginalized groups. This is through the use of mobile schools which are popularly known as "schools on wheels" and is structured in a way that they are flexible and tailored to meeting the needs of the clients [1,36]. This study focused on a community who lead a mobile lifestyle and therefore who are not favoured by the formal education which encourages sedentary lifestyle. The culture of the nomadic pastoralist community values family roles in the context of using livestock as medium of their economy. Moreover, it is a culture that defines wealth in terms of the size of livestock and believes that formal schools 'steal' a child from the family as this study confirmed and is also in line with the findings of Schilling, Opiyo, & Scheffran [40]. Since previously the Government of Kenya has been putting in place policies and programs aimed at promoting access to education to its citizens, the exclusion of the nomadic pastoralists has been persistent due to their nomadic lifestyle. Therefore, this study confirms the report by UNESCO [48], which states that Turkana nomadic pastoralists of Kenya have experienced very low enrolments in school nationwide, in comparison to other parts of the country.

To counter the challenges facing Mobile Schools in Turkana County, this study recommends the need to come up with different approaches of policy implementation, whereby, unlike implementation of policies in the formal system of education which appropriately uses the top-down approach [44]; some like the case of reaching the disadvantaged groups requires bottom-up approach. If access to education for the nomadic pastoralist societies is to be achieved, then the education system needs more flexibility in terms of its provision to the marginalized groups. The nomadic pastoralist community recognizes that education is important as a way of investing in options of income. In order for mobile schooling to run smoothly in provision of education to nomadic pastoralist groups in Turkana, the following were raised as ways of ensuring that the child is in school. This was in form of a question asking on a summary statement of what can be done to keep a nomadic pastoralist's child in school. All the teachers and parents in the FGDs brought up the issue of food, water and security as basic necessity that should be provided so as to keep a nomadic child in school.

One of the teachers aptly put it when asked on what is needed to keep a nomadic pastoralist Turkana child in school. The teacher summarized them as "food, water, security and a hospital." Another teacher also added that discouraging of early marriages for the girl child was needed.

To confirm this, still in an interview with one of the teachers, she observed:

Attendance is good especially when there is enough food and water. But when they have to move very far away, we have fewer children attending because the big boys, especially, have gone with the big animals. The government should also give food so that the young can attend school.

The big animals in this case refer to the animals that are able to move long distance for food and water; hence the young ones of these animals are left in hands of the younger children. The success of the schools in enhancing

participation of nomadic pastoralists in education is therefore dependent on linkage with provision of other basic needs such as food.

From the FGDs with the parents, the observation was that provision of medical services and water near mobile schools was important. Suggestions on the need to educate parents and enhancing awareness on importance of sending their children to school and prohibiting child labour and on early marriages for girls were raised as recommendations by the respondents. Nevertheless, the learners' FGDs indicated that they have ambitions and most of those commonly cited were to become teachers, doctors and managers of a Non Governmental Organization (NGO). This indicates that the community values education and with more awareness and sensitization, their participation in education may be enhanced. This study therefore recommends that more community sensitization and awareness be implemented in addition to role modeling so as to promote the need for schooling among this group.

This study recommends provision of other necessities, such as food and water as the main components of having more learners in school. This calls for a multifaceted approach of education provision. Moreover, considering that the main reason given for the dropout in enrolments is due to lack of food which is a basic need, then the government needs to look for short term ways of supporting them with food but have a long term plan of empowering the community so that they are able to sustain themselves in terms of food and hence ease the burden of providing education. This concurs with Ngugi, Mumiukha, Fedha & Ndiga [33] who advocate the need to undertake a more inclusive approach and tackle all the obstacles both institutional and fiscal that act as barriers in pursuit for universalizing access to primary education. Without adequate funding for the mobile school infrastructure to survive, then sustainable development towards this noble goal is likely to suffer. Therefore, the government needs to give mobile schools attention similar to that accorded to formal school in order for it to survive.

4. Concluding Remarks

Using a multiple case study approach, this investigation explored the challenges affecting the mobile schools in Turkana County, a region which has historical experiences of low participation in education since the early seventies to now. The objective was to understand the context and processes that explains the level of access to education among the nomadic pastoralists of Turkana County. The study used bottom-Up approach policy implementation theoretical framework to illustrate the continued exclusion from education, hence threatening its very goal of universalizing primary education.

The data suggests that mobile schooling has not been successful to a large extent. On the whole, these obstacles range from inadequate number of teachers, and for most of those present lack the necessary training and were expected to work on voluntary terms with some token given only twice a year, hence contributing to low motivation to work. Therefore, once they got greener pastures, they would leave immediately. Upon a new teacher taking up the job, the process would also require

them to recruit the learners once more. Without continuity in learning, such breaks depending on the length have adverse effects and may lead to increased school dropout cases, hence, affecting the participation of the nomadic pastoralist children in education. In addition, lack of basic needs like food and family roles like taking care of the sick when the adults are away for girls and herding animals for the boys, have consequential effects resulting to low participation of learners in mobile schools. Furthermore, the multi faceted approach may be appropriate for the sustainability of mobile schools. The fact that even though these schools are mobile by nature, so as to fit with the peripatetic lifestyle of the nomadic pastoralists, are facing challenges, questions their sustainability.

The conclusion of the study is that the survival of mobile schools, whose aim is to promote access to education among the nomadic pastoralists, is threatened. The anticipated benefits of provision of this form of schooling are yet to be realized. The goal of having mobile schools in place is to promote access to school among this nomadic pastoralist group. The most important critical input to this end is having motivated teachers who are adequate qualitatively and quantitatively. They need to undergo some training and be increased in number. The sustainability of mobile schools may require use of multi-sectoral approach so that there is provision of food and water for human and the livestock, which is the backbone of their economy. The study indicated the need for sensitization and creating of more awareness so that more parents can have their children in school. Therefore, a strong multifaceted approach for education provision is required in order to have not only the children from this community join school, but also to stay on till the end of the program. This may require strengthening through institutionalization of a monitoring and evaluation system in place in order to ensure its sustainability.

Nevertheless, all is not lost. This research confirms that there was a school that had been very successful in attracting many learners both young and adults. The school has a trained teacher, has food provided by a church organization and operates both day and in the night. The experiences of this school could be tapped to develop ways of promoting participation of the nomadic pastoralists in education.

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