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# Provision of Education to the 'Hard to Reach' Amidst Discontinuity in Nomadic Communities in Kenya

## **Abstract**

This study explores why nomadic children in the counties of Turkana and West Pokot are left behind in the primary education process despite free primary education (FPE), and considers the variables that contribute to high dropout rates, low enrollment, poor attendance, and unsatisfactory academic achievement with a view of bringing out possible strategies to mitigate against these factors of discontinuity. Based on a study conducted in two counties in Kenya, results suggest that formal education in Kenya has not effectively served the nomadic communities. Education indicators in these counties revealed that nomadic groups are at the bottom in national statistics pertaining to enrollment rates, school participation, classroom performance, gender balance, student achievement, progression to the next level of education and by extension training.

## **Keywords**

nomadic communities; discontinuity; participation; academic achievement

# **PROVISION OF EDUCATION TO THE ‘HARD TO REACH’ AMIDST DISCONTINUITY IN NOMADIC COMMUNITIES IN KENYA**

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## **Introduction**

The formal education system in Kenya has generally not served the nomadic communities effectively over the nearly fifty years since independence. Educational indices of performance in the two counties revealed that the nomadic groups are at the bottom of the table in national statistics pertaining to enrolment rates, participation, classroom performance, gender balance, achievement, progression to the next level of education and by extension training. Despite the existing government plans intended to ensure access and equity of education provision in the country, issues of imbalance in enrolment, completion rates and academic achievement between children of pastoralist communities and the rest of the country have been and are still a subject of debate considering the huge disparities that exist to which many feel are not receiving the expected attention. National primary school statistics since independence to date, for example, reveal that children from the arid and semi-arid lands (ASAL) regions of the country are most affected by under- enrolment and non-completion of school.

## **Context**

Nomadic pastoralists in Kenya keep livestock as a source of livelihood through sale and use of its products. The nomadic pastoral regions in the country are generally arid and semi-arid with high temperatures and with less than 750 mm of rain a year. These ASAL areas constitute 75% of the 582,646 km<sup>2</sup> of Kenya's landmass, and are home to 30% of the total population and nearly half of the country's livestock population (Oxfam, 2006). In most parts of arid regions, the soils are poor and rains are unreliable, consequently rain-fed farming is impossible, making pastoralism the only possible form of productive land use (Oxfam, 2006).

This case study looked at (1) Turkana County, which is arid and receives between 200-550 mm of rainfall annually. This is too little to sustain rain-fed agricultural farming.

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The climate is dry, with sporadic “flash” rainfall that abets soil erosion. The terrain is rocky with sparse vegetation primarily composed of thorn bushes. This area that accounts for 13% of all ASAL landscape is home to Kenya’s nomadic pastoralist community called the Turkana; (2) West Pokot County, which is primarily semi arid and some of the pastoralists in this county are becoming more sedentary making it easier to access education. The infrastructural development is slightly better even though this county suffers similar effects of climate, insecurity as the arid district of Turkana.

An analysis conducted in 2007 by the Ministry to map schooling levels of all persons aged six and above (at primary schooling level) indicates that only 16.3 % in Turkana and 53.4% in West Pokot have ever enrolled in school against a national average of 76.8%. Worse still, only 3% (and only 0.5% of women) in Turkana and 4.5% (with 1.8% women) in West Pokot have attended secondary schools, against a national average of 8.7 percent. Notably low is the population that has attended any post-secondary institutions, at approximately 0.6 percent for the two counties (KNBS, 2008). With regard to the net enrollment ratio (NER) (GoK, 2009h), the statistics are startling; Turkana County has an NER of 36.5% with 45.4% (boys) and 29.3% (girls). West Pokot has an NER of 65.9% (71.4% boys & 60.1% girls). This is in comparison to the national NER which stands at 91.6% with 94.1% boys and 89.0% girls.

The dropout rates are Turkana 18.2% (boys-16.8% and girls 19.9%) while in West Pokot the NER is 12% with boys having a dropout rate of 10.1% and the girls 14.0%. The national dropout rate is only 3.5% (boys at 3.2% and girls at 3.7%). These dropout rates in the two counties are representative of most of the ASAL counties and hence the concern on education performance in the two counties. The survival rates in Turkana stands at 40.9% (boys-42.2% and girls 39.4 %), while in West Pokot the rate of survival stands at 61.5% (64.4%-boys and 58% girls). The positive survival rates for West Pokot can be attributed to its being semi-arid and a sizable proportion of the population being sedentary. A statistic of worry is that of Low completion rate with Turkana having a rate of 43.9% (boys at 61.0 and girls at 25.5%) while West Pokot stands at 58.5% (boys at 70.6% and girls 47.9%). The two counties had an average of one teacher for 53.4 pupils against 1:43.9 for those counties that are agricultural and sedentary. The two counties performance in the Kenya Certificate of Primary Education (KCPE) are- Turkana had a county mean of 188.41 and West Pokot 193.24 against a national mean of 189.20 in the 2013 KCPE examination (MoE 2010).

This study explored why nomadic children in the counties of Turkana and West Pokot are still left behind in the primary education process despite the Free Primary Education (FPE) initiative by the government of Kenya aimed at enhanced access, equity and quality of education for every Kenyan child. The study considered the variables that contribute to high dropout rates, low enrolment, poor attendance, and unsatisfactory academic achievement with a view of bringing out possible strategies to mitigate against these factors.

## **Literature Review**

This literature interrogated included that of studies done on education for pastoralist communities so as to explore the reasons for the low participation statistics of pastoralists in the formal education system in Kenya. According to Carr-Hill (2012), there are 21.8 million pastoralist children out of school globally with 4.3 million in EFA Fast Track Initiative countries. Furthermore studies by the same researcher have revealed that the percentage of school-age children in pastoralist population posted school attendance ranging between 11% and 39% (Carr-Hill 2006). The 2010 GMR captures statistics for six African countries with high pastoralist populations and show very depressing attendance and participation levels (Ruto, Ongwenyi, & Mugo 2009) as compared to the same cohort of students in the less mobile communities. It can therefore be hypothesized that marginalization and education

deprivation is evident in the pastoralist areas across the region (UNESCO 2010; Danaher, Kenny, & Leder 2009) and calls for urgent interventions.

A sizeable number of studies (e.g. Gorham, 1978) assert that conventional approaches to education provision are largely felt to be unworkable in subsistence pastoral conditions; Morton, (2010) highlights the irrelevance of an imported western model of schooling and its incompatibility with prevailing social and cultural values and practices. Tahir (1997) provides a compilation of Nigeria's comprehensive approach to education and pastoralism. Gorham's study (1978) on what has been tried; where and how; ranging from boarding schools of Kenya to the tent schools of Iran-remains a useful account. Kratli's review (2001) is discusses the approaches adopted at enhancing access in pastoralists' areas. Interestingly, very few of the studies, if any, have focused on the impact of this continued low participation and achievement rates so as to develop functional approaches to increasing access and provision of quality education for the pastoral children in these two counties. This particular study attempts to highlight the disparities between nomadic groups and their more settled Kenyan populations from an advocacy perspective.

The studies on pastoralism and education provision bring to the fore a situation that is characterized by marginalization, conflict and competition over meagre resources (Dyer, 2012), and emphasize that the present mode of education services provision will have limited impact on the current status of pastoralists' education. Indeed education programmes that assume stability in the ecosystem of the inhabitants have been at odds with and in opposition to the nomadic fluid and unpredictable environments of discontinuity. Nomadic learners in Kenya experience similar educational setbacks as other pastoralist children, such as the Tuareg and the Bedouin in the North and the Basarwa or Bushmen of Botswana (Nkinyangi, 1980). Studies by Ezeomah (2002) reveal that pastoralist learners are left behind in primary education attainment due to constant migration, poor staffing, inadequate resources, vulgaries of nature and compliance with the traditional norms of the communities they are born in.

Their knowledge transmission process in aspects such as informal animal husbandry knowledge, skills in colloquial biology and environmental studies are passed on by parents, elders, and peers (Kakonge, 2006). They therefore acquire knowledge and skills in non-formal vocational education contexts. This explains why they will always lag behind in the formal education system, which limits the holistic functional education required for meaningful integration into the pastoralist way of life. Despite nomadic parents' acceptance of the formal national curriculum, a majority of them fear that the education process will force them into sedentary ways of life (Ismail, 2004) thereby stripping them of their herding culture and identity. In response to these concerns therefore, it would be expected that the national educational policies integrate aspects of pastoral socio-economic life in curriculum policy and process in Kenya.

What are the main constraints on the education supply in pastoralists' zones that were captured in the study? These included: the vast distances from schools and low population densities make it difficult to attract numbers in classrooms; the inadequacy of education infrastructures; educational curricula not adapted to pastoral modes of life; scarcity of teachers and absenteeism among herders' children who are called on heavily to work (MoE, 2007). In addition, insecurity is a major threat to school attendance in both Turkana and West Pokot.

Different approaches to supplying educational services for pastoral communities in Turkana and West Pokot have been in existence; notably stationary or mobile community schools in which learners have been enabled to access education (MoE, 2009). Both of these approaches have not yielded the expected outcomes considering the running national statistics on the impact of Free Primary Education for the last 12 years. Boarding schools for the pastoralist learners have also been a useful invention when school fees have been kept at

affordable levels. Initiatives from other regions of the world also provide many lessons: for example, tent-schools in Iran and Mongolia are managed by teachers who are pastoralists and paid by the government (UNDP, 2005). Finally, boarding schools combined with distance learning (through radio stations) have proven in themselves to be viable alternatives for education delivery to nomadic communities that are worthy of exploration and enhancement where they exist.

### **Theoretical framework**

The study adopted a theoretical approach centered on Bandura's Social Learning Theory (SLT) (1977). This theory revolves around four principles of social learning:

1. *Attention*. This study assumes that one cannot learn if they are not focused on the task. The learning approach should deliberately bring out aspects that reveal innovations, which are novel or different in some way, so as hold the attention the learners in such challenging environments. Social contexts (pastoralism) help to reinforce these perceptions.
2. *Retention*. Learners learn by internalizing information in the memories. The learners recall this information later when required to respond to a situation that is similar to the situation within which they first learnt the information. Given the environmental set up in arid areas, knowledge accumulation is a challenge.
3. *Reproduction*. Learners' reproduce previously learnt information (behaviour, skills, knowledge) when required. However, learners in the arid areas lack opportunity for practice through mental and physical rehearsal given their habitats and survival concerns which would help them to improve their responses.
4. *Motivation*. The human person needs to be motivated to do anything. Often that motivation originates from our observation of someone else being rewarded or punished for something they have done or said. This usually motivates us later to do, or avoid doing, the same thing. The set up in the semi-arid areas presents very few motivation opportunities.

Social modeling is a very powerful method of education. If children see positive consequences from a particular type of behaviour, they are more likely to repeat that behaviour themselves. Conversely, if negative consequences are the result, they are less likely to perform that behaviour. Novel and unique contexts often capture students' attention, and can stand out in the memory. Students are more motivated to pay attention if they see others around them also paying attention. It is obvious that given their circumstance, pastoralist children walk the path disadvantage in this regard. Another less obvious application of this theory is to encourage students to develop their individual self-efficacy through confidence building and constructive feedback, a concept that is rooted in social learning theory. With the scarcity of teachers in these regions, constructive feed-back is rare and in most cases non-existent.

This theoretical framework helped to conceptualize the study in terms of the drivers of learning- namely *attention, retention, reproduction and motivation* in relation to pastoralist learners. The theory further led to an understanding of the implications of low attainment rates by pastoralists' children being subjected to formal learning. The theory in addition allowed for extrapolating the results into key findings of the study.

### **Methodology**

The central question was a broad question that asked for an exploration of the factors that impede learning participation and attainment by pastoralist children in the two counties. The inquirer posed this question to head teachers, community elders, education officials, parents, local administrators, and students as a general issue so as to not limit the inquiry. In

this qualitative research, the intent was to explore the complex set of factors surrounding the poor attainment levels of education by pastoralist children and present the varied perspectives or meanings that participants held. Surrounding the central question the researcher posed the following sub-questions so as to narrow the focus of the study but leave open the questioning.

- How does the nomadic peoples' constant migrations/movements in search of water and pasture affect school attendance and achievement?
- Do you consider the current school curriculum relevant to the needs of the nomadic or pastoralist way of life?
- Considering the centrality of child labour to your production system, how difficult is it for children to participate in formal schooling?
- How do you think your physical isolation, and your operation in largely inaccessible physical environments affect the schooling of the children?
- In your opinion do you think you are receiving adequate educational support from the government and other agencies in terms of facilities, instructional materials and teachers?

This approach is well within the limits set by Creswell and Clerk, (2007) who recommended that researchers write no more than a dozen qualitative research questions in all (central and sub questions). The sub questions, in turn, can become specific questions used during interviews (or in observing or when looking at documents). In developing an interview protocol or guide, the researcher took liberty to ask an icebreaker question at the beginning, followed by five sub questions in the study above (Creswell & Clerk, 2007). The interview ended with the wrap-up question "Whom should I interview further to learn more about this situation affecting pastoral education in your county?"

Attempts were also made to relate the central question to the strategy of enquiry of phenomenology by broadly stating questions without specific reference to the existing literature or a typology of questions. Ayiro (2012) talks about asking what the participants experienced and the contexts or situations in which they experienced it. A phenomenological question that was constantly posed in this study was, "What is it like for a pastoralist child to access education under these circumstances?" (Ayiro, 2012 p. 151).

This study was about the phenomenon of pastoralism and education (Sifuna, 2005; Morton, 2010) and in a sense an advocacy study aimed at providing the nomadic children a "voice" (Creswell & Clark 2007), considering them not only as members of a long-marginalized ethnic minority group, but as "child labourers" who have been underrepresented in active participation and enrolment in primary schools throughout the history of education in Kenya. The selected sample of children ranged between 7-16 years of age, commensurate with the general delay of enrolment and completion of nomadic learners in formal primary schools across the ASAL's. A total of 10 parents, 1 male and 1 female primary school teacher, and one school head teacher, 2 administrators (District Education Officer-DEO & District Officer-DO) 4 local leaders (Chief, Assistant Chief, Woman Leader and Church Leader) and 10 children (allowing for gender parity) were interviewed in each of the two counties through stratification in zones (based on the administrative locations) followed by purposive sampling. There were 2 focus groups of 8 persons per county comprising of 2 administrators, 2 local leaders and 4 parents (2 male and 2 female).

Data analysis involved categorization and theme generation derived from the interview data (Creswell & Clark 2007). Major themes derived from the analyzed data were rephrased as sub-headings based on challenges and school practices encountered by the nomadic children in their primary schooling. The analysis of this data provided qualitative perspectives for interpreting the discontinuities surrounding nomadic education. This in turn allowed for a discussion of the challenges facing nomadic education provision and the identification of opportunities for overcoming the discontinuities in pastoral areas.

## Results

The major constraints established by the study to the participation of nomadic communities in education are:

- The nomadic peoples' constant migrations/movements in search of water and pasture;
- The irrelevance of the school curriculum, which is tailored towards meeting the needs of sedentary groups and thus ignores the educational needs of nomadic peoples;
- The centrality of child labour to their production system, thus making it extremely difficult for children to participate in formal schooling;
- Their physical isolation, since they operate largely in inaccessible physical environments;
- The inadequate education provisions for the ASAL areas by the government

Data collected from this study indicates that higher dropout rates, lower enrolment and achievement rates, and lower completion percentages were identified as ongoing problems in both counties. Some of the observed schooling practices that constitute learning challenges for the children in the two counties included unfavorable school learning times, inappropriate school levies, rigid implementation timetables, insufficient teachers, poor classroom environments, a curriculum at odds with the children's nomadic way of life, and parental phobias regarding children's primary school outcomes. In the two counties it was further revealed that learning is disrupted regularly by flooding rivers, famine, insecurity and unexplained absenteeism. The headteacher of Pkatieny primary school in West Pokot summed it well when she wondered "do the people who set national examinations know how irregular learning is out here and that these students cannot sit the same examinations with their counterparts in, for example, Nairobi Primary School where continuity in learning is the norm?"

In the interviews with the learners, community leaders, teachers, parents and education officers, three aspects came out very strongly:

### *A curriculum at odds with the learners' nomadic way of life*

It was evident that the current curriculum is taught to nomadic children outside their social and economic realities. The prescribed curriculum fails to integrate thematic aspects of the content into the functional learning needs of the pastoralist child. From the interviews in this study, nomadic parents express their disgust with some of the curriculum content. Citing subjects such as Science, where students are taught topics like "breeding in frogs," parents consider such curricula not only dysfunctional to the daily needs of their children, but also ineffective to the needs of their herding and social life style. This then discourages some of the parents from allowing their children to continue with schooling, as they consider the curricula to be an insult to their intelligence and culture (Woldemichael, 1995) Predictably many parents withdraw their children, or simply do not pressure them regarding the regular attendance required for school completion.

The outcomes of the study further reveal that the curriculum processes adopted by teachers in nomadic schools are incompatible with traditional nomadic learning processes. That they lack culturally sensitive pedagogical approaches, and the strategies fail to adopt the practical exploratory learning method to which the children are accustomed, and are embedded in their pastoral lives. Most of those interviewed expressed the view that the government should ensure that the teaching methods employed in the nomadic schools encourage practical, exploratory and skill oriented approaches. Only then can their children be receiving functional education that will make them both 'learned' and 'productive' in their pastoral environment. One teacher exclaimed, "*Haya masomo ni bure kama mtoto hata jindeleza*" (This education is useless if it is not applicable in life).



Apparently, most teachers in the two counties accepted that they lack training in culturally adaptable methods and techniques that would encourage a diverse pedagogical approach. They rely more on the traditional model of teaching (Dyer, 2013) which delivers instruction without taking into account individual differences, learning needs and environmental set-ups.

One of the other factors that came out clearly from the study was that the curriculum policy and process of learning in nomadic primary schools should encourage the retention and promotion of the mother tongue (MT) in the two counties. That MT should be taught as a subject by trained teachers, and be the medium of instruction. The rationale here being that curricular content will be connected to children's previous knowledge and begin to anticipate unfamiliar courses such as Science and Social Studies as they progress.

The children's and their parents' frustration and inability to see the relevance of the school curriculum often resulted in the learners dropping out of school to pursue the knowledge and skills that they and their parents considered as a more functional education. The parents interviewed pointed out that the above concerns need to be addressed by the curriculum developers by making the curriculum more relevant to pastoral settings and their social and economic lifestyles. Only when such issues are addressed will there be retention and acceptable achievement levels of nomadic children in primary schools in the two counties. This line of thinking was more prevalent in Turkana, perhaps because of its being more pastoral than West Pokot.

### ***Inappropriate school levies***

The capitation for FPE is universal in the country and many of the respondents found it as an unfair allocation considering the discontinuities (varying and uncontrolled occurrences) existing in regions such as West Pokot and Turkana. Due to these limited resources from the state, the provision of education in these ASAL counties has been affected and the burden of running of these nomadic primary schools is passed on to the parents. Through the interviews, it was documented that in some of the rural schools it is not uncommon to find teachers introducing "unavoidable financial levies" which they claim are used to augment dwindling school resources. Indeed, in some of the schools the teachers claimed to purchase instructional materials such as chalk, as well as dusters, lesson preparation books, and physical education equipment such as balls outside the official FPE funds. Some of the parents interviewed reported that some teachers insist that all students' purchase required learning materials themselves; this obviously overstretches the resources of poor, rural nomadic parents. Considering the government's stated responsibility for providing all children with "free" education, including all necessary learning resources, parents become suspicious of school demands and the government's failure, thereby building a culture of distrust toward all school management. Inadequate allocations and irregular disbursements were flagged as major impediments to the provision of education in the two counties.

### ***Constrained Human Resource, Capacity & Facilities***

Observations from Mobile and fixed School Visits in Turkana County revealed the following:

**Teachers.** Each school had one teacher who, in all the three observed cases were males. All the 3 teachers were untrained with academic levels of education being of primary level. The one ECD teacher encountered was trained at certificate level. The presence of untrained teachers in mobile schools can be attributed to: (a) the fact that these schools operate outside the formal schooling policy - if they were registered by the ministry, the Teachers Service Commission (TSC) would have been conditioned to post teachers, and (b) the harsh environment in which nomads live discourages teachers to want to stay.

**School location.** Where a borehole had been sunk, the school assumed a fixed and predictable status and shade off the 'mobile school' tag. The presence of water enabled the families to remain in one site for long periods. On the other hand the school locations for the "true" mobile schools were very temporary and truly demonstrated how the vulgaries of nature influence the whole learning process in these ASAL areas.

**School Time.** The age of the learners, their engagement in pastoral activities and the availability of teachers determines the timing of a given school session. Learning is restricted for a few hours to enable the learners to engage in their daily pastoral chores. The apparent flexibility in the learning schedules gives the impression that the whole learning process is lax and lacks the expected seriousness of a schooling environment. The concept of schooling is best described by this response from the head teacher of Kalenchuch Primary Turkana East Sub-County when asked about the apparent laxity towards learning retorted "school should not be too strict considering that these people live under very unpredictable and harsh circumstances".

**Teaching/Learning.** Classroom observations revealed that this was not well executed due to lack of materials, and limited teacher capacities and numbers. Teachers attempted to use English in instruction, a clearly unsuitable language for communities that almost entirely communicate in mother tongue. Given the vast area, and the low teacher capabilities, radio and other related ICT's presents exciting possibilities for enhancing learning.

**Transition.** While mobile schools are enhancing education participation, circumstantial evidence suggests that more than half the learners are not able to transit beyond a particular level due to the long distances from primary school settings, pastoralism and lack of teachers. More concerted effort is therefore needed to ensure that children transit to the next level. If left to parents, the transition will not be attained.

**Management.** The observations in the field showed that most of mobile schools have their umbilical cords attached to some existing distant primary schools. The head teacher of the primary school acts as the reference point, facilitating the working of a given mobile school including transition of the pupils to the next class. By their very nature and inherent limitations, mobile schools are considered as being "non-formal" and therefore seen to be inferior, a fact that is reinforced by their having lowly rated teachers.

From the above analysis, the need for alternative strategies for education provision to these pastoral communities in Kenya is urgent if they are to overcome the ever-growing disadvantages and subsequent gap in educational attainment arising out of the discontinuities in their environment. The provisions of the 2010 Constitution of Kenya and the various policy documents on education in the country strongly urge the government to provide equal educational opportunities to all Kenyans. This has the intention of ensuring that vulnerable groups like pastoralists have unfettered access to basic education. The envisaged National Commission for Nomadic Education (NCNE) should be operationalized to oversee the implementation of the Nomadic Education Programme (NEP). The NEP should aim at providing and widening access to quality basic education for pastoralists, boosting literacy, equipping them with skills and competences to enhance their well-being and enabling them to participate in the nation-building process. To meet this challenge effectively, the Commission will need to devise a series of innovative approaches and strategies all aimed at providing quality education against a background of fragility and discontinuity that constitutes the environment of the pastoralists in Kenya

## **Discussion**

It is apparent from the respondents that the social and environmental set-up of the nomadic communities in the ASAL's (which is subjected to regular and sometimes frequent discontinuity and fragmentation of groups) militates against regular attendance of formal

schooling, or even the establishment of regular schools. The formal school programme simply does not address itself to these continuous variations (discontinuities) nor to the more extensive migrations, which these people have shown historically.

Continuity of teaching is regularly disrupted in the ASAL's as a result of under-funding and late release of approved funds; unwillingness of the government to make special budgetary provision for nomadic education; indiscriminate transfer of teachers from nomadic primary schools to conventional primary schools without replacements; absenteeism (arising out of staff morbidity or the need to travel long distances to the nearest education office or town for services); inadequate or non-availability of teaching materials; collapse of infrastructure (arising out of floods or the vagaries of weather); droughts; the dearth of teachers in terms of quantity and quality (a ratio of about 4 teachers per school in Turkana) with a significant percentage (30%) lacking the minimum requisite teaching qualification prescribed by government in addition to insecurity. The above occurrences present obvious disadvantages to the children in ASAL's as compared to their counter-parts in the sedentary regions of the country. In view of these disadvantages, learners in the ASAL's have to be provided with alternative platforms for curriculum delivery that is different from the typical school-model that is universal in Kenya today. Flexibility in approach with initiatives such as 'mobile schools', Open and Distance Learning (ODL), and application and use of varied ICT's will be necessary in the teaching, evaluation and even development of curricular for the nomadic learners.

Infrastructural development in zones conducive to pastoralism has, nevertheless, rarely seen adequate investment. Where population densities are low, learners are scattered, and economies of scale are difficult to achieve, policy norms have rarely succeeded in ensuring that primary schools are available and/or consistently meet stipulated quality thresholds. These are often also areas where conflict is ongoing and/or a sudden escalation of violence is likely (IGAD 2007). Expanding school systems are already challenged to provide and retain adequate numbers of well-trained teachers (Murphy and Wolfenden 2013) – all the more so in the harsh conditions where pastoralism thrives. Nationally, it is estimated that Kenya as a country has a shortfall of 80,000 teachers for its schools, a situation that disadvantages the pastoral areas of the country more. Selecting teachers from pastoralist backgrounds is an obvious strategy but since few pastoralists have been able to access even initial primary education, very few attain eligibility for teacher education programmes (McCaffery et al. 2006).

There has been documented affirmative action towards increasing the participation rates and quality of education for nomadic children in the county even if the gains are still below the expected targets. The ministry of education continues to receive the highest allotment of recurrent government expenditure. This allocation, which has averaged 21.6% over the last 5 years has been consistent and depicts government commitment to education across the country. The benefit of increased budgets no doubt reaches the learners in the ASAL areas. The international community, through international organisations such as Oxfam, the UN (particularly UNICEF and WFP) and the World Bank has supported many aspects of education in arid regions.

In addition, the official planning documents guiding the education sector, namely, the Sessional Paper No. 1 of 2005 and the current Sessional paper on education of 2012 along with the Basic Education Act of 2012 reiterate the government's commitment to increasing educational opportunities for all Kenyans. Alongside this has been the Kenya Education Sector Support Programme (KESSP) which had a total of 21 investment programmes funded from a common pool to benefit the entire country. One investment programme "Expanding opportunities in arid and semi arid lands" was entirely devoted to the ASAL's. The other investment programme that equally benefited ASAL's is "Primary schools infrastructure".

Low cost boarding schools and mobile schools were funded under these two programmes. The funding, channeled through the Ministry of Education (MoE), for example, was KES 280 million from USAID and KES. 84 million from the World Bank for the then 16 ASAL Districts. The government, separately, has engaged in; (a) funding of low cost boarding primary schools and (b) the School feeding Programme in the ASAL counties. Other pro-ASAL initiatives include:

### **Mobile Schools**

Research on ASAL areas offer mobile schools as a viable schooling option for enhancing access in ASAL, and yet it is only recently that the government begun to make deliberate efforts to promote their existence. The mobile school approach is intended to adapt to the socio-economic lifestyle of pastoralists. Mobile schools have been, in the past, initiated mainly by Non- Governmental Organizations (NGO's) and local communities in the ASAL's. There is evidence of government engaging in collaborative efforts with the critical stakeholders to promote these schools in Turkana County. According to MoE, mobile schools may run from ECD to Class 3 thereafter, learners are supposed to transit to ordinary primary schools.

Data on mobile schools from the MoE is scanty and unreliable. This can be attributed to the fact that Sub-County education officers only make returns for public schools and generally ignore mobile schools. The vast distance, weak administrative systems, lack of transport makes it difficult to monitor the actual number of schools. Some mobile schools have not met the minimum requirements put forth before benefiting from funding. According to a MoE brief (March 2009), there are 51 funded mobile schools scattered over nine ASAL Sub- Counties. The schools have a total enrolment of 4437 (1833 boys and 2604 girls). About 60% are in Turkana district, while the rest are distributed in eight other arid districts. In the fiscal year 2007/08, these schools were funded up to the tune of KES 26,575,091.

### **The Church**

The church in Kenya has been credited with starting and expanding schools in arid districts. From the literature, in Marsabit, the Catholic church is supporting an extensive community based pre-school system. In Maikona Parish for example, 20 nursery schools enrolling about 1500 children are supported. The church pays the teacher, provides learning material, guides the teachers on how to teach and supports SFP. The priest also facilitates entry to boarding primary schools within a radius of 80 km. The pre schools are registered with the nearest primary school, which can be as far as 30 km away. The pre-schools situated within the "manyattas" are mobile. The intention is to grow these units to at least class 3. This allows children to remain at home longer before they proceed to boarding school. Given the low population density, having a full-fledged school may not be cost effective.

While the impact of these schools in aiding access is tremendous, it has been observed that "for many children, nursery will be their only education. Parents may send a few children to primary school" (Sifuna, 2005 pg.16). Sustaining children in school will require investment in school types nearer to families. The mobile pre-school system in Marsabit (Chalbi) run by the Catholic Church presents exciting possibilities of giving children a head start in formal schooling. These church supported schools perform two functions with greater regularity and efficiency, which results in better schools and better transition. First, the church offers a "supervisory role" ensuring that these schools are monitored. This enhances accountability from teachers. The chances of learning not occurring because of "teacher unavailability" are minimised. From the literature, all four pre-schools visited during the field visit were in session. Second, unlike the MoE mobile schools in which children repeat the same level and ultimately drop out because of lack of access to primary schools, the Catholic

Church (parish priest) follows up and arranges for children to join the next school. By identifying the school and transporting the children, the church plays a significant role in aiding transition from pre-school to class 1.

### **The Family**

The ‘family learning’ approach experienced in parts of West Pokot presented an invaluable option for getting education to the ‘hard to reach’ in Kenya. The rationale of this approach is that it considers learning to be a social undertaking and combines adult literacies for parents and the education of their children. Because intergenerational learning already plays a strong role in knowledge transfer within nomadic communities, family learning appears to offer a good fit with existing socio-cultural norms (therefore avoiding the negative trade-off involved with school-based education). Key principles include community consultation and the design of a menu of activities that allow families choices to fit their specific and differing needs.

Children from nomadic households are exposed to exceptionally unfavourable trade-off in curtailing informal learning and enduring forced separation from their family environment in order to seek the advantages of formal education within a school-based system. It is therefore important to think strategically and find ways to integrate formal education to the contexts and processes of informal learning, so that synergy can be created between the two systems rather than informal education being lost from the system.

### **Open and Distance Learning Programs**

It has been recognized that the flexibility of open and distance education approaches can in principle offer suitable opportunities for nomads to access education (ADB, 2001). The purpose of open learning is to remove all existing obstructions to learning, based on the 2010 constitutional provisions of education rights for all Kenyans. As for the case of pastoralists’ in this country, providing education through the current formal education system presents an impediment to learning for these communities. The strategy for use of distance learning aims to enable as many nomadic people as possible to take advantage of learning opportunities. Face-to-face learning approaches, and the use of the national formal curriculum would still be integrated within the intended distance learning programmes.

In laying the strategies of ODL, it will be important to bear in mind that the quality of distance learning programmes will be decided by their educational effectiveness and economic sustainability, as opposed to the level of technological advancement. The technology should therefore be simple, easily affordable and scalable. It has been documented that past models of application of distance education have failed to disengage from the school-based model of teaching and learning, thereby missing-out on educational opportunities presented by embracing the informal learning scenario. For example, most distance education systems simply use radio as a replacement for the teacher, configuring a platform for learning that assumes a school-based conceptualization of learning. Documented experiences in use of community radio education have demonstrated the possibilities presented by informal settings to exploit a whole different set of resources in the learning process. The further development of these ideas offers interesting opportunities for designing a distance learning system that specifically targets nomadic people.

The ODL would guarantee nomadic children a formal education in the same subject areas as the other school children in the country but matched with a concern for relevance. A curriculum will only become ‘relevant’ to pastoralist children by engaging the functional subjects from their daily reality, tapping into their knowledge base as constructed by pastoralists themselves. Relevance cannot be achieved from one formal national curriculum constructed from the center and with a rigid framework. It will be necessary to ensure that

the institutional capacity is developed for the development, implementation and evaluation of this relevant curriculum for pastoralist communities. In this approach pastoralism should be viewed from a functional paradigm and present it with the reality of pastoralism as a productive force.

### Conclusion

Nomads transfer social and livelihood knowledge from one generation to the next by teaching and learning in family units. The functional unit of the family therefore provides a literacy platform that offers the promise of a very good fit for transmitting existing socio-cultural norms as opposed to schools. Any attempt at innovating the curriculum for the nomadic learners has to put this aspect into consideration. The initial expenditure for such an approach will be high considering the initial inputs in terms of content and capacity. However the investment is a viable one considering its relevance and appropriateness and the possibilities it opens up for the learner. ODL approaches proposed above offer viable mechanisms for programme delivery to the pastoralist children. It is important to appreciate that ODL should not be viewed as a general educational 'magic bullet' for the nomadic solution to education provision.

With regard to cost, ODL programmes are rarely less expensive than conventional schooling. This can only be an obstacle if ODL is chosen as a cheap shortcut to mass education. Education provision to nomadic peoples is a very different scenario, driven by practical and educational rather than economic rationales, the switch to an ODL system is in order to include learners who are not reachable with school-based education. Indeed, it is reasonable to expect somewhat higher costs associated with reaching the 'hard to reach' learners. Making quality school based education available to all the children in nomadic groups, although not solving the problem of those who cannot take advantage of schools would also have a significant cost, most likely higher than the average per-student cost so far. It is against such a cost that one has to measure the cost-effectiveness of an alternative ODL strategy (Goldsmith, 2003).

Indeed pastoralists' resistance to education is not about formal education; nor is it an attribute of incompatibility between pastoralism and education. On the contrary, the resistance is about the predisposition to provide formal education in a solely school-based system. It is about schooling in a 'school' setting, irrespective of the environment, rather than the formal education itself per se that is sticky.

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