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**TRANSFORMATIVE INNOVATION LEARNING HISTORY**

**NOMADIC EDUCATION IN KENYA: A CASE STUDY OF MOBILE SCHOOLS IN  
SAMBURU COUNTY, AS A TRANSFORMATIVE INNOVATION POLICY**

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## Introduction

The 17 UN Sustainable Development Goals (SDGs), that is, the global Agenda to '*Transform our World*', with a pledge to 'leave no one behind'<sup>1</sup> outline various areas of transformation. Education, SDG 4, is one of the areas of transformation. Consequently, SDG4 aims to ensure inclusive and equitable quality education and the promotion of lifelong learning opportunities for all. Kenya has been investing in education as a primary means of improving the socio-economic conditions of the citizenry. In the conventional education settings, curriculum delivery is predominantly tailored to 'static' situations where children learn in classrooms in permanent locations and timings are inflexible<sup>2</sup>. This approach has proved to be less inclusive, particularly for nomadic people, making them among the most marginalized social groups in terms exclusion from educational provision, in spite government pledges of "Education for All".

Samburu County is primarily inhabited by nomadic pastoralist communities. These communities live a lifestyle which involve frequent resettlement in search of fresh water and pasture for their livestock. Due to the pastoralists' constant resettlement, children from these communities have found it difficult to formally access the Kenyan stationary and secular education system. Educational inclusion is only realized when it genuinely includes everyone. Therefore, new approaches must be tailor-made for such groups. Government interventions, for example, increasing opportunities for conventional schooling, will not address this gap.

In his speech at the 'Forum on Flexible Education' in 2006, the then Education Permanent Secretary for Ministry of Education, Prof. Karega Mutahi, 'concluded that "the needs to address key factors that inhibited children from accessing education and that appropriate solutions be found that did not alienate nomads or antagonize their culture and life style' (MOEK/UNICEF, 2007: 13).<sup>3</sup>

Reaching the most marginalized; providing access to the most historically neglected will require new and flexible learning models. To access education, there is necessity for protective spaces or *niches*, where teaching and learning can occur for transformation to take place in these marginalized communities<sup>4</sup>. The mobile schools (as niches) is a significant step forward in providing culturally appropriate education to the hard-to-reach children who are marginalized because of traditional lifestyles. Mobile schools (MSs), informal education provision to nomads, are an innovation to fill the gap resulting from the rigid national education system. MSs are a form of alternative educational facility that are normally not stationary, but one that caters for learning in more than one place over time and space<sup>5</sup>. MSs are flexible in terms of mode of delivery, curriculum, and school calendar; and are movable from one place to another. Hence, they use collapsible classrooms that can be assembled or disassembled within 30 minutes and carried conveniently by pack animals<sup>6</sup>. They have therefore proven their worth and appear to fit nomadic peoples' culture, lifestyle and livelihood.

The objective of this case study, using the transformative Innovation Learning History (TILH) methodology, is to trace the implementation of mobile schools, their successes, challenges and

their quality of services in an effort to achieve SDG 4. The case study is based on focus group meetings and field interviews conducted on 28<sup>th</sup> May 2019 at Locho village of Samburu Central sub-County, Samburu County. In addition, the focus group and interviews, a national workshop for stakeholders on nomadic education was held on 30<sup>th</sup> May 2019 at the National Commission for Science, Technology and Innovation (NACOSTI), Nairobi, Kenya. According to data at Samburu Central education office, the sub-County has seven (7) active mobile schools with an enrollment of 566 pupils. Samburu is a rural and pastoral community. Mobile (or shepherd) schools (locally known as *Lchekuti*) brings education closer to the people where they live, making it possible for children and youth in particular to study at their location of choice and at their preferred pace.

### **Key insights on transformative innovation based on the case study**

- In order for innovation to produce societal / social impact and lead to transformative change, alignment with existing culture and lifestyle is vital. The representative of the County Commissioner attributed the high enrolment in mobile schools by the Samburu community to the fact that the mobile schooling approach does not pose a threat to their cultural lifestyle, but instead provides affordable education to the community in ways that compliments their way of life and economic livelihood.
- Bottom-up approach plays a significant role and is essential to innovation for transformation. The mobile schools in Samburu is a “community-led / owned initiative” previously identified in the region in 2003 through Participatory Rural Appraisal (PRA) methodology in collaboration with UNICEF to ensure proper needs analysis and ownership [see Table 1].
- Inclusion, in this case via ownership by the Samburu (local) community, is essential to the adoption and diffusion of transformative innovation intervention. The Samburu mobile school initiative has led to the adoption of education by children and adults in the rural area, with spill overs to formal education. As a result of the MS initiative children in the rural areas and pastoralists are able to read and write. At the same time, children are able to assist their parents in herding the livestock, while acquiring education alongside.
- Incumbents and established actors, such as governments, can have a decisive role to play in transformative innovation. This must be encouraged and utilized with application. In this case study, the County Government of Samburu built an Early Childhood Development (ECD) Centre in Locho area and a road. The ECD Centre serves as a shelter during rainy seasons while the road provides transportation access to the rural area.
- Connecting transformative innovation to existing initiatives facilitates scaling up, sustainability and transformative change with long-term societal impacts. The Samburu community mobile schools, which are informal in nature, now act as feeders to formal schools. Hence, there is enhanced enrolment in formal schooling and transition to formal schools/education and with improved performance in national examinations across the country.
- Inclusive innovation contributes to achieving national development priorities and societal goal/impacts. This in turn leads to transformative change and improved well-being. The

transformative nature of the mobile schools has resulted in positive impact on peace, security, and stability in the region with implications for the nation as a whole. As a result of attending mobile schools and acquiring education via the mobile schools, boys in mobile schools stated that (a) cattle rustling (crime) has reduced in the area, (b) they now value human life and (c) are able to communicate to people outside their communities. Relatedly, girls stated that mobile schools have protected them from early marriages. Women (their mothers) corroborated these accounts by adding that the schools have improved the behavior of their girls since they no longer idle around after herding their livestock.

- The Samburu case revealed that other SDGs (e.g. Gender) are also being achieved through this initiative. The MSs are attended by both girls and boys, while other actors are involved in the management of the MS, thus promoting inclusivity and achieving the SDGs [Table 2]
- Transformative innovation is made successful by inputs and contributions from a wide range of actors. In Table 1 below, we see inputs from Christian churches representing civil society; government agencies at various levels, and the community which provide for example, food, financial support to mobile school teachers and security, writing materials, and paraffin used for lighting.

**Table 1:** Timeline of key policy and strategy events and responsible organizations

YEAR	ACTORS	REFERENCE/SOURCE
2000	A catholic priest who used to see children idling in the afternoon after herding their flocks, decided to introduce bible classes to the children. This brought opportunity to introduce literacy and learning to the same children.	Catholic Church Parish of Maralal, Samburu County
2003	Free Primary Education (FPE) introduced by presidential decree and this improved enrolment in mobile schools and transition to formal schools. Through Participatory Rural Appraisal (PRA) methodology, the community in collaboration UNICEF saw the need to introduce literacy education to the children so that they can benefit from FPE without it interfering with nomadic lifestyles of their children.	<a href="http://www.education.go.ke">www.education.go.ke</a>
2005	According to <b>Sessional Paper No. 1 of 2005 on Education, Training and Research</b> it states that, “ <i>whenever possible integrate alternative modes of provision of education, such as mobile schools among nomadic communities.</i> ”	<a href="http://www.knqa.go.ke">http://www.knqa.go.ke</a>
2006	Arid Lands Resource Management Project currently National Drought Management Authority (NDMA) worked in collaboration with the Ministry of Education (MoE).	<a href="https://www.ndma.go.ke">https://www.ndma.go.ke</a>
2009	UNICEF through the World Bank came in and supported the programme through provision of writing materials, camel for carriage of the writing materials, tents/canvas and payment of salaries to the teachers.	<a href="https://www.unicef.org/infobycountry/kenya_59518.html">https://www.unicef.org/infobycountry/kenya_59518.html</a>
2010-2015	The MoE started supporting the programme to by developing the policy on “for education for all” and provision of stationaries. The mobile schools started acting as “mother / feeder/satellite school” to pre-schools and regular schools. The boarding schools were strengthened through, <b>Sessional Paper No. 14 of 2012 on Reforming education and training sectors in Kenya</b> . The paper calls upon the Government and other players to expand, equip and strengthen mobile schools, and; increase number of Mobile Schools linked to mother schools.  <b>Basic Education Act of 2013</b> , Section 94 of the Basic Education Act, 2013 established the <b>National Council for Nomadic Education in Kenya (NACONEK)</b> . <b>The functions of NACONEK include:</b> Formulate policies and guidelines, to innovate in education methods, to identify investment opportunities, and to address factors, which impede nomadic education. It would also mobilize funds, create mechanisms to coordinate and evaluate the activities of agencies in the field of education, ensure that nomadic education reaches across district boundaries, establish linkages with other Ministries, establish standards and skills to be attained in nomadic schools prepare statistics, channel external funds to nomadic schools, and advocate for nomadic education among others.	<a href="http://www.education.go.ke">www.education.go.ke</a>  <b>Basic Education Act of 2013</b>  <b>Basic Education Act of 2013</b>

	<b>Policy Framework for Nomadic Education of 2015</b> obliges the government to provide grants and other forms of assistance to mobile schools, to facilitate the establishment of more mobile schools and introduction of open and distance learning (ODL).	
2015-2017	Institute of Integrated Rural Reconstruction (IIRR) supported mobile schools through provision of writing materials and payment of stipends for the teacher.	
2018 to date	The Community has been supporting the mobile schools up to date. At the lowest level in the village, the council of elders' acts as the entry points for any new idea or project. The community provides food, writing materials, paraffin for lighting, and financial support to mobile schoolteachers and security.  <b>Sessional Paper No.1 of 2019 on Education, Training and Research</b> reiterates the <i>expansion of Mobile Schools in Kenya as a means of ensuring access</i>	<b>Basic Education Act of 2013</b>

Source: authors

**Table 2: Actors (networks)** at various levels involved in Samburu Community Mobile Schools

<b>National Level</b>	<b>County Government Level</b>	<b>NGOs</b>
<ul style="list-style-type: none"> <li>• Ministry of Education (policy)</li> <li>• Teachers Service Commission (employs Teachers)</li> <li>• Ministry of Interior (security/coordinate national government activities)</li> <li>• Lobby groups (advocacy)</li> <li>• Elected leaders (gate keepers)</li> </ul>	<ul style="list-style-type: none"> <li>• The Samburu County Government (manage ECDCs, water, toilets, classrooms, and community sensitization on education, anti-FGM campaigns, and establishment of rescue centres)</li> <li>• Community (Initiators)</li> <li>• Students (end-users)</li> <li>• Parents</li> <li>• Village elders</li> </ul>	<ul style="list-style-type: none"> <li>• Samburu Children Programme</li> <li>• Child Fund</li> <li>• World Vision</li> <li>• Samburu Child Initiative</li> <li>• UNICEF</li> <li>• IIRR</li> <li>• AMREF</li> <li>• Religious groups</li> <li>• Afya Imarisha</li> <li>• Financial institutions (mainly Equity, KCB)</li> </ul> <p><i>(Capacity Building, Sensitization, Supplement Resources)</i></p>

FGM: (Female Genital Mutilation) IIRR: (International Institute for Rural Reconstruction)

Source: authors

## Background

In 1990, Article 3 of the World Declaration on Education for All (EFA) identified nomads as a discriminated group in terms of access to education services and demanded ‘an active commitment’ to removing educational disparities. Twenty years on, the 2010 Education for All Global Monitoring Report (GMR), “Reaching the Marginalized”, noted that this challenge had become urgent: in the rapid progress towards Education for All (EFA), pastoralists have been left far behind (GMR 2010, 179) and continue to face extreme educational disadvantage (GMR, 2010)<sup>7</sup>. The practice of pastoralism, *i.e.*, the phenomenon of migration taking livestock and source of livelihood, presents many challenges in achieving education for all. Hence, millions of nomadic children are outside the education system and have low school enrolment, attendance, classroom performance, achievement, continuity to higher education and gender balance.

However, in the past few years, the education of pastoralist communities has assumed much importance keeping in view of the fact that in the changing world order and globalization, the acquisition of basic functional literacy and numeracy is a felt need among the nomads. The nomads need to comprehend factors that affect their occupational roles like understanding instructions on health and animals’ treatment and schemes relating to animal husbandry. The modern world is knocking on their door; nomads need to develop a sense of belonging to the larger, modern world wherein learning is a crucial commodity for survival. Nomads also need to read and understand various policies introduced by the national and respective county governments for their betterment.

This TILH case study demonstrates how complex innovation processes in mobile schools happened, identifies its transformative elements, record and reflect the experience, then develop insights and ideas for future research and Transformative Innovation Policy (TIP) experimentations.

Samburu pastoralists are gradually embracing education and improving their literacy. Many are interested in formal education. They admire children who go to school. In a FGD, the head village elder stated: “Communities have been yearning for education and today the community’s children are going to school”.

### Theoretical Insights:

*“During the consultation work undertaken so far, adult pastoralists expressed a strong desire to learn about economic and political themes that directly affect them, as well as civic issues and other aspects of being a Kenyan” - Getting to the hardest-to-reach: A Strategy to provide education to nomadic communities in Kenya through distance learning. Office of the Prime Minister Ministry of State for Development of Northern Kenya and Other Arid Lands, March 2010.*<sup>8</sup>

However, the main obstacles to the education of nomads lie in effective access to education, with a curriculum delivery services mainly tailored to ‘static’ situations where children learn in classrooms in permanent locations. This strategy has proved to be less inclusive, particularly for massive population of nomadic people who prioritize nomadic life for their livelihood. Nomadic schooling has worked well where the local administrative culture is sympathetic to and supportive of pastoralism as a livelihood system but has not worked well where it was not (everywhere else). This context-specificity was confirmed by the Samburu community elders during the FGDs. The elders stated that “for a pastoralist, livestock comes first and therefore when the season is dry they must move away to look for pastures”, hence low enrollment during the dry season. Therefore, there is a need for an education strategy that takes into account the culture and lifestyle of the nomadic communities in the country.

Nomads transfer social and livelihood knowledge from one generation to the next by teaching and learning in family units. A family literacy approach appears therefore to offer the promise of a very good fit with existing socio-cultural norms rather than the disruption and resultant trade-off to use schools. A programme that is relevant and suited to the needs of the learner has a much better chance of retaining them. –

MSs thus house a teacher who is selected by the community, usually untrained or may be trained by EMACK (Education for Marginalized Children in Kenya) and NOHA (Network on Humanitarian Action) particularly on multi-grade and use of training materials. The teacher who understands the local lifestyle is therefore selected on the basis of trust through vetting from the local community and usually teaches in the local language. They live and move with the host villages of mobile schools and provide continuous education to pastoralist children. As a result, children attend secular lessons in the afternoon after herding.

#### **Participant Reflections, Samburu**

“A child even as young as seven-year-old is an asset in a pastoralist community as they take care of young goats and sheep” **(Sub-County Officer, Samburu Central, FGD)**

“In Samburu and pastoralists communities, everything is subordinate to their nomadic livelihood” **(County Commissioner’s Representative)**

The local community motivates the teachers through various ways, including payments in kind. For government employed teachers from outside the local area, in addition to their regular salary, they are also paid a hardship allowance by the government.

**Document Quote:**

*'..... at present, mobile schools are set up in semi-permanent villages. As soon as the village scatters, they become unfeasible. Pastoralists cannot change their livelihood: it is the education system that should change'* (Gabra women of the Kalacha Women Group, Marsabit, Kenya). **International Institute for Environment and Development (UK), 2009. Mobile Pastoralists and Education: Strategic Options. Education for Nomads Working Paper 1.**<sup>9</sup>

### **The Emergence of Mobile Schools in Samburu**

This TILH sought to trace the evolution of the mobile schools with a focus on Samburu County and explore them in the lens of transformative innovation policy. The case is a multi-actor narrative, which draws on field interviews, and focused group discussions (FGDs) conducted on 28<sup>th</sup> May 2019 at Locho village of Samburu Central sub-County, Samburu County (Figure 1 and Figure 2).

In Samburu County, where a majority of the population are not Muslims, FGDs revealed that in year 2000, a priest based at the Catholic Diocese of Maralal started teaching in the afternoon bible classes to some idling children who had finished herding animals. This brought with it an opportunity to introduce literacy learning to the same children. Then in the year 2003, there was the introduction of Free Primary Education (FPE) in Kenya through a presidential decree, as a result, the need for education by the community increased. A Member of County Assembly (MCA) of Samburu narrated how mobile schools were “community own initiative” identified in the area in 2003 through Participatory Rural Appraisal (PRA) methodology by UNICEF and community members. The Representative of the village elders shared how the initiative has prompted the children to like education since they are able to read and write at the same time able to assist their parents in herding the livestock, a practice that they revere for their survival.

From 2009, mobile schools received both material and financial support from the Government of Kenya, UNICEF and the International Institute for Rural Reconstruction (IIRR), which was a World Bank initiative for Arid and Semi-Arid Land (ASAL) Development. The government’s assistance included provision of tents/canvas, writing materials, salaries to the teachers and a camel for carriage of the writing materials during migration in search of water and pastures during dry season. The manner in which mobile schools took off in Samburu County is a clear proof of inclusiveness nature of mobile schools. Various actors including civil society, the church and government participated in the introduction of mobile schools in Samburu (**Table 2**). As a result, there has been an improved enrolment rate in mobile schools and increased transition to formal schools thus fulfilling the SDGs pledge of *‘leaving no one behind’*.

The mobile school initiative aims to increase access to education for children over 7 years old through the provision of culturally and/or religiously appropriate basic education to children who would otherwise find it difficult to access formal education. School structures are temporary and materials portable. That makes school materials easily transportable by camel as communities travel in search of water and pasture during drought.

**Participant quote**

“At first the community feared mobile schools as (UNICEF) were not trusted, but on seeing no issues, many parents bought the idea and slowly by slowly parents brought children one by one” (Mobile school teacher, FGD)

**Participant quote**

“Mobile schools were ‘community-owned initiative’ previously identified in the area in 2003 through Participatory Rural Appraisal methodology in collaboration with UNICEF” (MCA, FGD).



**Figure 1.** Focused Group Discussion (FGD) with Community and sub-County Leaders at Locho village, Samburu Central sub-County, Samburu County, 28<sup>th</sup> May 2019. Note: Standing on the right side is a village elder giving his views.



**Figure 2.** FGD with mobile school children and formal school children at Locho village, Samburu Central sub-County, Samburu County, 28<sup>th</sup> May 2019. Note: normal/formal school children are in uniform, while mobile school children are in civilian / plain clothes.

A national workshop for stakeholders on nomadic education was held on 30<sup>th</sup> May 2019 at the National Commission for Science, Technology and Innovation (NACOSTI), Nairobi, Kenya (Figure 3). In addition to the FGDs and workshop, secondary sources of information that included various government documents, reports, and books, research papers in journals, economic surveys, magazines and periodicals were also reviewed for the study.



**Figure 3.** Some of the participants in the national stakeholders' workshop on mobile schools held on 30<sup>th</sup> May 2019, at NACOSTI, Nairobi, Kenya.

## **Policies Guiding Mobile Schools (2005-2015)**

The Ministry of Education started to support the mobile schools through the policy for education for all. The mobile schools act as mother/feeder/satellite schools to schools (*i.e.*, regimes) that operate with rules and regulations (*i.e.*, routines). According to **Sessional Paper No. 1 of 2005 on Education, Training and Research**, it states that, “*whenever possible integrate alternative modes of provision of education*, such as mobile schools among nomadic communities.

An appropriate and accessible curriculum plays a major role in retaining learners; and it is crucial also in relation to securing for all children the right to quality education. A curriculum becomes ‘relevant’ to pastoralist children by tackling the foundation subjects (language, literacy, maths, sciences, etc.) from the perspective of pastoralists’ daily reality and pre-existing knowledge, as constructed by pastoralists themselves. It is crucial to build capacity (to meet these requirements) within all the institutions concerned with pastoralism and education (at all levels). The institutional understanding of pastoralism needs to go beyond the pastoralism-as-a-lifestyle perspective and come to terms with the reality of pastoralism as a productive force contributing to national development. Mobile school initiative, while they focus on basic literacy and numeracy skills, they also take into consideration the mobile lifestyle of nomadic communities. Thus, curriculum content goes beyond education to respond to the environment, drought and poverty prevalent in the region.

### **Participant quote**

“Mobile school syllabus is non-formal (tailor-made) *i.e.*, condensed/accelerated to teach only main concepts in a multi-grade way to take care of older children (**Director General, Basic Education and Early Childhood State Department, MoE, HQs, Nairobi**).

Education is one of the most critical factors of empowering and driving positive economic development and social progression in any country and therefore has positive effect on all the other SDGs. The Kenya Vision 2030 was unveiled in 2007 as the country’s development blue print with the goal of transforming the country into an industrialized middle-income nation by the year 2030 (GoK, 2007)<sup>10</sup>. Therefore, under education and training, Kenya Vision 2030 envisages provision of a globally competitive quality education, training and research for development. The Constitution of Kenya recognizes the right to education as a fundamental right of every child. The vision sets out ambitious goals for education and recommends for number of boarding and mobile schools to be increased and alternative models of education provision in pastoral areas.

The challenges of ensuring that a national education system is relevant to pastoralists’ needs and values are just some of the reasons why educational participation and achievement is often much lower in pastoral areas of many countries in Africa than the national averages. The situation is worse for girls.<sup>9</sup> The practical challenges in providing education to nomads appear to be rooted in the tendency to provide formal education solely in a school-based system.

School-based education conflicts with household functional-mobility patterns which, in dryland areas are vital to enhancing animal production. This has negative impact on the efficiency and reliability of the pastoral production system. The Government of Kenya recognizes these difficulties and is committed to overcoming them, hence the need for the development of an education strategy that is responsive to the needs of Kenyan pastoralists. It is crucial to think outside this box and find ways to link mainstream education to the contexts and processes of informal learning, so that informal learning can be harnessed and woven into mainstream education, rather than lost from the system. This is the reason for introducing mobile schooling system to enhance educational effectiveness in areas where the school-based system is a barrier to learning such as pastoral communities. Consequently, a special attention was paid to these groups by the Kenyan Government when it set-up the National Council for Nomadic Education in Kenya (NACONEK) as a policy on 15<sup>th</sup> May 2015 (GoK, Basic Education Act of 2013)<sup>11</sup>. The Vision of NACONEK is *‘a well-educated nomadic community at par with the rest of the country’*. Policy framework on nomadic education in Kenya, section e) states that there is need to *“recognize the richness of traditional nomadic pastoral knowledge and techniques by incorporating them into formal curricula”* (MOEK/UNICEF: 11)<sup>12</sup>.

The Kenyan Ministry of Education’s nomadic education policy framework states: ‘nomadic pastoralists require flexible education delivery modes that take into account their children’s work at home’ (**Ministry of Education, 2008, Policy Framework Paras 1.1.7.**)<sup>13</sup>. Thus, the Ministry of education strengthened low cost boarding schools and provided mobile schools with stationeries. In addition, **Sessional Paper No. 14 of 2012 on reforming education and training sectors in Kenya** calls upon the Government and other players to expand, equip and strengthen mobile schools, and; to increase number of Mobile Schools linked to mother/formal schools.<sup>14</sup>

In contexts where formal education takes place within a ‘national’ culture that looks down on nomads and their livelihood, the nature of the schooling experience is highly problematic for nomadic children. Schools in remote areas are often too poorly built, staffed and equipped to offer an excellent quality service. The question is whether to do more of the same or to acknowledge the specificity of the situation of nomads and, without compromising on quality or merely looking for a ‘soft’ fix, try educational alternatives that better match this situation. It also raises questions about delivering a ‘standard’ curriculum, which necessarily prioritises someone else’s perspective and knowledge from elsewhere.

Recommendations from international workshops on nomads and education have stressed the importance of providing nomadic children with education of a quality and status equal to that provided in standard schools (Ezeomah, 1997)<sup>15</sup>. This recommendation is in order to avoid creating pockets of second-class education, either because of lower quality or because of lower status and legal recognition. This position also seems to match the view of many pastoralist parents who, just like most parents from other backgrounds, invest in their children’s education as an avenue to future status and economic reward (Krätli, 2008<sup>16</sup>; Little *et al.*, 2009)<sup>17</sup>.

Quality education for pastoralist communities will require substantial and sustained political commitment. As stated above, at present, such commitment exists, through the **Basic Education Act of 2013**, Section 94, where the government established the *National Council for Nomadic Education in Kenya (NACONEK)* in 2015<sup>11</sup>. This formed an essential political commitment, which helped to achieve increased access to education among the nomads. NACONEK's mandates include formulating policies and guidelines, innovating in education methods, identifying investment opportunities, and addressing factors, which impede nomadic education. In an effort to have a system's approach NACONEK mobilizes funds, creates mechanisms for national coordination and ensuring nomadic education reaches across district boundaries. In addition, the commission establishes standards and skills to be attained in nomadic schools, prepares statistics, channels external funds to nomadic schools, and advocates for nomadic education among others.

### **2015: Policy Framework for Nomadic Education**

The framework recommends the provision of grants and other forms of assistance to mobile schools. It also recommends for facilitation of the establishment of more mobile schools and introduction of open and distance learning (ODL) as a strategy.

### **2018 to date:**

The Community has been supporting the mobile schools up to date. In the villages, there is the council of elders who are the entry points/gate keepers to the community. The communities provide food, financial support to mobile schoolteachers and security. They provide writing materials and paraffin used for lighting. **Sessional Paper No.1 of 2019 on Education, Training and Research** reiterates for the expansion of Mobile Schools in Kenya as a means of ensuring access to education in nomadic communities.

### **Use ICT in Mobile Education**

In education, as in other dimensions of development, over-optimism about technology as the solution to all the challenges comes at a cost. Impoverished and remote rural areas typically gain access to new technologies with a significant delay, even when – as for information and communication technology (ICT) – they are the ones with the greatest need. Mobile schools have tents which already carry solar panels that can be connected to TV and DVD players, demonstrating potential for use of contemporary technology. The NACONEK can also enter into contractual agreement with the network providers to procure relatively inexpensive mobile phones, which can then be distributed to nomadic children. Facilitators, via a simple call using their mobile telephones, can call the nomads to track their students' progress in their studies, and to determine and address any problems that any learner – whether they are stationary or mobile – typically face in mastering the course materials and learning objectives. Similarly, the nomadic learners can also be regularly encouraged to call the course facilitator on their mobile phones, should they encounter any problems or require clarification or help. The focus can include cross-learning between communities themselves so that schools can be replicated and facilitators can call and network with their fellow facilitators. Use of mobile phone

in one's native language, can help to establish a cordial and hence, sustainable learning atmosphere based on trust and collegiality.

### **Migratory routes**

Movement cycles are consistent with the rainfall and hence search of pastures from lowland / valley areas during dry season to highlands during the rainy season, when they move away from mosquito infested lowlands. Consequently, there is potential for designated learning centres being established at strategic locations along the nomads traveling routes, providing a place where a facilitator can attend to the needs of the nomads. Other materials, such as learning manuals and programme syllabi, can also be distributed from these strategic locations. However, logistical problems are seriously undermining the government's efforts to access the rural population in remote areas, especially in these nomadic regions. As a result, with devolved system government introduced from 2013, nomadic communities' lifestyles are increasingly getting sedentary as government is deliberately working towards this for ease of service provision. Programmes like the Arid Lands Resource Management Programme (ALRMP) and devolved funds, Constituency Development Fund, (CDF) have been successful in some areas resulting to some mobile schools being weaned off as niches for nomadic children and formalized to sedentary cheap boarding schools. Currently there a total of 426 such schools in ASALs of Kenya.

**Transition from mobile to formal schools (niche-regime interactions):** Mobile schools have been well received by beneficiary communities who are happy that their children are receiving basic education which is suited to their nomadic lifestyles and integrated with their cultural values. For many, this has been the first time ever they have had access to basic education. Mobile schools have established linkages with regular primary schools for children who wish to transition to formal education sector.

The success of the mobile school initiative is evident. Mobile school provides both formal and cultural education without compromising the other. In addition, the nomadic pastoralist lifestyle is labour intensive by nature; as such children contribute to the household labour needs by tending to the animals and caring for younger siblings' children. The flexible nature of the mobile school timetable therefore allows for children to acquire basic education and still contribute to the survival of their families by learning herding skills.

Consequently, mobile schools have:

- Increased access, retention and transition among children from nomadic communities
- Enhanced parental and community participation and support to education initiatives
- Enhanced community adult literacy typically provided by mobile school teacher

To date, several children have transitioned to the nearby Kisima Boarding School in order to complete primary education subsequently join secondary schools. This calls the need for tracer studies to quantify their numbers, especially those who join tertiary institutions.

**Challenges:**

Some of the challenges in the provision of educational services to nomadic areas are similar to those faced by other rural and marginalized households globally. These include insecurity (due to clan hostility/conflicts and cattle rustling), lack of teachers willing to work in the conflict situations (most schools have only one teacher who may sometimes become unwell), poor infrastructure as well as poorly motivated teachers (most just volunteer or paid in-kind), a household economy dependent on livestock, persistent and prolonged droughts and famine with children spending long periods away from their homes and walking long distance in search of pasture and water.

Almost, all the schools in the community are functioning in less than optimum conditions. Stakeholders have taken some steps to improve the conditions and functioning of the mobile schools for example by providing teaching staff. There are hardly any facilities in these schools that experience a shortage of qualified teachers and/or teaching and learning materials. Available teachers conduct classes without matting to sit on (most ideal as can easily be transported), no chairs or tables, blackboards and uniforms. The schools have no tents for protecting children from rain and sunshine. Children of these nomadic communities are unable to pursue education due to their nomadic lifestyle and low levels of income.

Frequent seasonal migration practice is one of the biggest hurdles in the education of children in nomadic communities. During the migratory life, majority of the communities and children leave their education at primary level. Since most mobile schools operate up to standard four only, there is no education facility, which forces the community members to abandon education, unless they enroll in low cost boarding schools. However, there is unreliable and obsolete data on transition to formal schooling. This calls for policy to streamline the transition from mobile to mainstream stream schools that have different management procedures, for example, have rules and regulations (routines) to be observed, unlike mobile schools.

Most of Samburu being remote, there is lack of ICT services in schools due to no electricity, computers and teachers who are skilled to offer the lessons, unstable network for mobile phones, high costs of ICT services, inadequate facilities. This calls for the need for supplying electricity in most parts of Samburu, install internet boosters, expand ICT services and make them more affordable to the youth and have computer classes tailored to meet the needs of the pastoralist community.

**Six Variables of Transformative Innovation Policy****1. Directionality:**

Mobile schools have taken a new trajectory of relying on portable locally available simple materials. In Samburu, typical mobile schools consist of a makeshift classroom with a portable blackboard and other customised materials for writing. In most cases, mobile teachers conduct classes under a tree

and use a donkey or camel to transport themselves and their teaching and learning materials. This study affirms that mobile schools are informal in nature and therefore the schools have flexible formal rules and regulations to be followed by pupils. For instance, mobile school timetable starts in the evening after herding, when temperatures are low, there is no age limit for learners and children do not need to put on school uniforms. Instruction are in local vernacular language, teachers (usually untrained) come from the local nomadic families or group of families targeted for education provision and are therefore familiar with the environment.

The County Education Boards supervise mobile schools in their respective regions. The government through provision of tents, solar lamps, stationaries supports the mobile schools, provides a camel to facilitate mobility of the teacher and sometimes salary of the teacher. Since most classes take place in the evening when there is no sunlight, the county government has constructed permanent structures, which serve as Early Childhood Education (ECD) centres during rainy seasons and provide solar lighting in the evening. Directionality can be applied to identify other possible means of improving on access to and providing quality education to the nomadic communities in order to allow them to compete with the rest of Kenyan schools for more socio-economic impact. As innovation mobile schools rely on simple easy to carry tools to realign education delivery model to the nomadic lifestyle. Thereby enabling increased accessibility in the face of ignoring modern day innovations usually associated with static schools. This has seen mobile schools act as feeder schools to formal schools. Hence, there is enhanced enrolment/transition to regular schools and with improved retention and performance in national exams.

## **2. Societal goals**

Kenya has been investing in sedentary education as a primary means of improving the socio-economic conditions of the citizenry. Under sedentary education, the government design standard curriculum delivery services, and majorly tailors them for ‘static’ situations where children learn in classrooms in permanent locations. With time, this strategy has proved to be less inclusive, particularly for massive population of nomadic people who prioritize nomadic life for their livelihood. Pastoralists still lag far behind and continue to face extreme educational disadvantage. Thus, nomads are among the most marginalized social groups who are widely excluded from educational provision, despite pledges of Education for All. Mobile schools are essential to the local community as they are an innovation to fill the gap created by rigid national education curriculum that fails to reflect the environment and knowledge of pastoralist children. Mobile schools act as feeder to formal schools. Hence, there is enhanced enrolment/transition to regular schools and with improved performance in national exams. Mobile schools form a useful innovation for addressing the transformation for all as reflected in the 17 SDGs that pledge to ‘leave no one behind. Mobile schooling is an attempt to achieve SDG4 that is to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all<sup>1</sup>.

### 3. System level impact

Mobile schools have contributed to peace and stability. Most boys are learning and therefore they are not idle to engage in cattle rustling and theft. Through education, they have been empowered to understand that stealing animals and killing fellow human being is wrong and immoral. On the other hand, the girls attending mobile school feel protected from early marriages and the women (their mothers) corroborated that the schools have improved the behavior of their girls since they do not idle around after herding. For centuries, milk and meat produced by their domestic animals constituted the main diet of the Samburu people. However, through Samburu integrated primary healthcare, mobile schools children and their parents have started including vegetables in their nutrition as a way of fighting malnutrition. Hence new partnerships/networks include health, agriculture and livelihoods. This multi-sectoral approach will bring all service providers across the sectors together because nomadic communities' issues cut across all the sectors. The mobile schooling initiative therefore has positive implications on sectors that include education, health, environment, peace, security and justice.

### 4. Learning and Reflexivity

“Mobile school is a ‘community-owned initiative’ previously identified in the Samburu area in 2003 through Participatory Rural Appraisal methodology in collaboration with UNICEF” (MCA, FGD). Considering the engagement of the civil society and the community in their establishment, mobile schools have a high level of inclusiveness, thereby using innovation as a mechanism for inclusive development. After years of running mobile schools, the Ministry of Education and the County Government now see mobile schools as feeder schools to formal schools (*i.e.*, niche-regime interactions) and girls rescue centres. The research team interrogated (first order learning) the routines and practices of sedentary schools and found that new routines and practices such as removal of some current school regulations are gradually coming into play hence enhancing the prospects of second order learning.

#### Document Quote:

*“Pastoralists have increasingly become aware about the importance of education and thus no longer resist the idea of formal education in comparison to older times. Children and adults now fully understand the importance of education and are enthusiastic about learning”* --- **International Institute for Environment and Development (IIED), 2010, Results of future scenario planning with nomads in Kenya.**<sup>18</sup>

### 5. Conflict versus Consensus

The problem of nomads is not only the poor attendance and graduation rates of nomadic children in school, but also the complex social networks of nomadic life. The migratory lifestyle forces parents and children to make a difficult trade-off decisions between acquiring formal education through the school system on one hand; or following the fundamental, informal learning about their own cultural, social and economic world available to them as herding members of the complex social networks of

nomad life, on the other hand. The modern world is knocking on the doors of nomads, and the need to develop sense of belonging to the larger modern world wherein learning is a crucial commodity for survival. Weather patterns are also changing with many families losing their livestock due to effects of climate change. Consequently, some families are choosing sedentary lifestyle. There is an critical need therefore to equip those who leave pastoralism with the relevant education and skills to find employment on the broader economy or create jobs. Similarly, there is an equally urgent need for those children who elect to remain active pastoralists and be responsible for tomorrow's animal production in the ASALs to have access to the same level of education as others.

## **6. Inclusiveness**

Although the mobile schools initiative has inclusiveness at the centre, more can be done in this area. Urgent attention should focus on strengthening parents and local community's involvement in making financial contributions towards operational expenses in mobile schools as a way of further enhancing inclusivity in the operation and decision-making, ensuring that children of both genders have access to literacy and numeracy learning, and achieving sustainability.

### **Final reflections on transformative potential of Mobile Schools in Samburu County**

- Mobile schools offer an atmosphere favorable for achieving “Education for All”.
- This research shows that there is an increasing demand for access to education among the nomadic communities due to enhanced awareness on value of education through the mobile schools initiative.
- Mobile schools are playing a useful role for the nomads and without mainstreaming them, the country will fail to meet the needs of the majority of herding households regarding quality of education offered, thereby failing to achieve the relevant SDGs which Kenya subscribes to.
- There is a need to strengthen the mobile schools so that more and more nomadic children are able to take advantage of the initiative to enable children of the migratory population receive the relevant education needed to support their economic and social needs.
- As mobile schools provide a flexible model of education that is well suited to the nomadic pastoralist lifestyle, there is a need for their immediate up-scaling to reach the most scattered far-flung and remote nomadic children and adults.
- There is an urgent need to provide mobile school students with proper infrastructure such as tents, source of light at night, books, chairs, toilets and sanitation facilities, portable drinking water and mid-day meal, which is the right of these students. Also enforce anti-FGM Act and provide sanitary towels to schoolgirls to retain girls in school.
- The government should take some steps to promote and strengthen mobile schools besides stationary schools for nomadic population, which can help the nomads receive quality education.
- Nomadic education programme need to be aligned with the national curriculum to ensure equivalence with the rest of Kenya, and ease of transfer from nomadic to formal schools.

- The county Government needs to map and establish additional shelters along the migratory routes of the nomadic pastoralists with more focus on geographical features (e.g. springs, stones and caves) that nomads use for food and security.

## **Conclusion**

Mobile schools have immensely benefitted the Samburu community by enhancing access to schools, thereby reducing illiteracy in the region. That said some challenges remain. For example, there is need for a curriculum audit to address the quality of mobile schools education. Other challenges include improvements in infrastructure, funding (e.g. to ensure teachers' salaries), more significant policy support, and sustainability of the mobile schools initiative. In spite of these challenges, it is crucial to recognize the key role that mobile schools are playing in Kenya in fostering transformative change. The resulting transformative change is not only within the nomadic community but also extends to the formal education sector in ways that include increased education enrolments, improved productivity and economic gains, better health of nomads and their livestock, societal cohesion, peace and security. There is therefore the need for strengthening the mobile schools initiative through training of teachers in multi-grade skills, development of a policy on transition from mobile schooling to formal primary and secondary schools. Greater policy intervention could strengthen the mobile schools initiative and improve their effectiveness and efficiencies as essential education and development service delivery in Kenya.

## **Looking into the future**

1. TIP initiative could further explore mobile schools in a broader sphere of Kenya and consider studies on policy audit to that could help gather lessons from other mobile schools beyond Samburu. The resulting learning could feed into formulation and implementation of mobile schools but also education (and related e.g. health, ICT, environmental) policies.
2. Further studies could attempt to ascertain the roles and effectiveness of key actors and stakeholders e.g. the National Council for Nomadic Education
3. There is need for a policy shifts on various fronts, for example, on teacher education. Such policy shift may require the lowering of entry into qualifications and criteria into teacher training colleges (TTCs) and a shift in TTC curriculum to address the needs of lack of qualified teachers for mobile schools

The various outputs resulting from this study – national STI policy ecosystems mapping, policy brief and journal publications – will help to inform the next steps on research, practice and policy on the mobile schools initiative in Kenya

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