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Achieving Sustainable Inclusive and Equitable Education: A Practical Approach Among the Pastoralist Communities in Kenya

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Education is an indispensable tool that drives development and transforms societies for sustainable development. Policy frameworks at global and national levels dispense legal and uniform discourses on strategies to enable equity in the provision of education. Despite the frameworks, children and youths are still out of school, which indicates that the sustainable development agenda could be unattainable within the anticipated timeframe. This study was designed to critically examine and evaluate the practicability of intervention strategies for inclusive education and suggest ways of improving intervention measures for up-scaling the strategies for sustainable learning among Pastoralists. The key questions include; what are the practicability of the intervention strategies for inclusive education within the pastoralist communities? How can the intervention measures be improved for the effectiveness and success of inclusive education? The focus on inclusive education is dwindling, mainly managing those already enrolled in schools, with lags to tap those not in school. The study utilized a multi-method approach of descriptive and correlational designs through a quantitative and qualitative approach, addressing macro and micro-level issues in inclusive education. Findings show that about 50% of the schools had between 1 to 3 teachers thus majority of the classes were unattended during every given lesson. Also, distance to school had some influence on learner enrolment where the findings show an R square of .067. and a standard error of .51. Strategies applied such as mobile schools to tap learners and enable learning among the pastoralist communities, worked but collapsed due to lack of funds for the needed resources. Beneficiaries from mobile schools are for its reintroduction and up-scaling to enable equitable access to education and sustainable inclusion. This research details effective strategies for enabling inclusive education and widens our understanding of how inclusive education would be implemented, blending with local sociocultural praxis.

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INTRODUCTION

Inclusive education requires that all learners be considered in the Education system, hence evaluating equitable ways to enable inclusive education is a progressive way to upscale inclusive education (Lucy & Orodho, 2014; KIPRRA, 2024). Exclusion in education takes various forms which include; nationality, economic condition and ability, social and ethnic origin, language and gender (UNESCO, 2023). A benchmark to inclusion; Sustainable Development Goal 4 and Vision 2030 framework emphasize ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all, is a cause to pursue to see that forms of exclusion are managed and eliminated for equal access to affordable education, that is achieve universal access, acquire education; for knowledge and skills for sustainable development in societies.

Universalizing access to education across children, youth, and adults; calls for identifying barriers that are encountered in accessing educational opportunities and identifying resources needed to overcome hindrances (Lucy & Orodho; Maria, 2024). One out of five children experience a form of educational exclusion in Africa (UNESCO, 2023).

In the case of Kenya, the Ministry of Education has engaged in progressive policies that promote inclusive education. The 2012 Basic Education Act has provisions for the elimination of gender discrimination, non-discrimination, encouragement and protection of the marginalized, persons with disabilities and those with special needs. The 2013 Technical and Vocational Education and Training Act laid the

foundations for an education framework that facilitates the training of persons with special needs, minorities and marginalized groups. Kenya's Vision 2030, pays attention to citizens with various disabilities and marginalized communities. Some matters in question require investigation since the interventions for inclusive education such as mobile schools, school feeding programmes and adult education programmes within the pastoralist nomad of Turkana are dwindling. Hence, what are the practicability of the intervention strategies for inclusive education and their effectiveness? How can the intervention measures be improved for success? What is the teacher capacity requirement to implement inclusive education? These issues comprise the focus of this study. Cars and West (2015) emphasize that education in the 21st century should be restructured to enable sustainability; this is by education giving opportunity of access to all since education is the engine of stable societies. The key question can be; how can inclusive education be managed and what are the effective intervention strategies that would yield success?

Continental Doctrine for Inclusive Education and Situational Expose

Agenda 2063 on Africa we want is to deliver inclusive education and sustainable socio-economic development; that no child should be left behind in education to enable the acquisition of skills, knowledge and attitudes needed for a progressive economy. This will help boost Africa's economic growth and development and lead to the rapid transformation of the continent. The continental progress report on agenda 2063 (2022) on goal 2; well-educated citizens and skills

revolution underpinned on science, technology and innovation indicates an attainment level of 44% while goal 4 on Transformed economies and job creation achievement level was at 17% (African Union Development Agency, 2022). This would imply that there are issues with respect to access and equity in education, manifest through; accessibility, geographical and gender issues, infrastructure, and special needs. UNESCO (2022) reported on the world out-of-school population at 244 million children and youth between the ages of 6 and 18 worldwide in 2021, out of which 98 million are in Sub-Saharan Africa. This could imply issues of access to education, school calendar and timetable, and teacher training and deployment and technology; or in Management and Administration which requires monitoring and supervision, since these parameters if implemented as planned would revolutionize education for sustainable economies. The parameters give major areas that require effective implementation, monitoring and evaluation; checking if project indicators are being met within the time frame logged or if there could be a need for revamping, to enable the attainment of the planned deliverables in goals.

Despite the frameworks, Sub-Saharan Africa has the highest rates of education exclusion; over one-fifth of children between the ages of about 6 and 11 are out of school, followed by one-third of youth between the ages of about 12 and 14 and almost 60% of youth between the ages of 15 and 17 are not in school (UNESCO, 2019). African continent and African children still face major challenges such as; inaccessible infrastructure, forms of disability and discrimination, marginalized groups and barriers in teacher training and capacity when not tailored to particular exogenous factors, which have continued to deter progress towards inclusive education (AU, 2022).

The challenges derailing the success of free primary education and free day secondary education could be embedded in the implementation of educational policies. Lack of adequate infrastructure, the remoteness of many pastoralist groups, and the lack of an inclusive

education policy that considers the indigenous people's culture hinder the attainment of Education for All (Koissaba, 2019). This paper assessed the practical approaches that could upscale inclusive and equitable education among the pastoralists in Kenya.

Kenya's Agenda on Inclusive Education

The constitution of Kenya (2010) bestows every Kenyan the right to education. Basic Education Act (2013) on free and compulsory primary and secondary education directs for quality education for all. Nomadic Education Policy (2010), targets quality education for nomadic communities in exclusion of their social concerns, this trades their education and poses competition to educational requirements, making the provision of quality education among the pastoralists a challenge (Republic of Kenya, 2010).

In financing inclusive basic education, the government allocated Ksh. 628.6 billion in the 2023/2024 financial year to cater for main textbooks, tuition, medical insurance, activity fees and participation in skills development activities such as SMASSE. Key strategies that would enhance inclusion among the pastoralists such as mobile schools, were not considered by the budget. The Basic Education Act 2013; the sixth schedule, clearly gives the guidelines on handling nomadic education which include; initiating the development of policies on all matters relating to nomadic education in Kenya. It is the implementation of this policy that is yet to be fully realized. Additionally, there are policy issues regarding the implementation of inclusive education among the marginalized and expansive nomadic pastoralists. This study documents a framework on how quality and equitable education could be achieved among the pastoralist nomads.

Turkana County has a high out-of-school population, 109,414 primary school-age and 106,368 secondary school-age children are out of school in the county (Republic of Kenya, 2015). KIPPRA (2020) on Kenya's economic report indicate Turkana count has the highest poverty

rate at 79.0 per cent, that the county has the lowest real Gross County Product (GCP) per capita have the highest poverty rates and is mostly in arid and semi-arid lands. Mandera, West Pokot and Turkana had the least GCP per capita of Ksh 28,602, Ksh 38,021 and Ksh 38,592, respectively. These counties are in arid and semi-arid lands with minimal economic activities thus widespread poverty. Kenya heavily practices agriculture even at the household level to cushion hunger. These counties have very minimal agricultural activities practised and thus could contribute to the high poverty levels experienced in the regions.

Purpose and Objectives

The purpose of this study was to examine the education status and its effect on inclusive education within the pastoralist nomads and provide evidence and intervention strategies that can work to upscale the attainment of inclusive education within the nomadic pastoralist, Turkana.

Specifically, the study sought to;

- Examine the status of educational resources and their effect on inclusive education within the nomadic pastoral Turkana, Kenya.
- Examine the intervention measures employed for inclusive education and suggest strategies for upscaling inclusive education within the nomadic Turkana, Kenya.

LITERATURE REVIEW

Issues affecting inclusive education have been attracting a lot of attention from education stakeholders (Wanes, Done & Knowler, 2021). Some of the studies have focused on challenges affecting inclusive education and strategies for achieving inclusive Education (Sindiswa, 2008; Lucy & Orodho, 2014; Ileri, King'endo, Wangila, & Thurair, 2020). This however has majorly been for the integrated classrooms. The gist of the study was emphatically for the marginalized communities whose out-of-school population is alarming (UNICEF, 2015). Both the educators and the Government have noted the significance of attaining education for all as an economic

engine to sustainable development. This calls for maximizing research on issues still derailing the efforts being made towards inclusive education, for the social benefit of the marginalized communities and nation at large. Much progress is noted to be made in regard to inclusive school environments and classroom environments. Inclusive education today draws an inclusive meaning to include; placement, special needs and functional education infrastructure (Nilholm, 2020). However, inclusion should ensure the tapping and sustaining of all children into the education net to improve access to education, including those from the marginalized regions; the pastoralist nomads, which this study upscales for effective implementation.

Feruz, Madina and Dilbar (2020) conducted a study in Thailand on the essence of inclusive education in developed countries. The findings reveal that schools practice inclusive classrooms with attention to learners with special education; considering each type of disability and providing tools that normalize learning. This enables equity in access to education and learning in classrooms for all children.

Expansive distance covered by children every day to attend school could hamper the efforts put to retain children in schools. Primary school children aged between 6-13 years' access to education could dwindle with only 50% enrolled in schools; 53.2% boys and 46.6% girls compared to the national average of 92.5%. Overall school attendance is at 41.06% against the national average of

76.34% (Turkana County Government, 2019). This could be attributed to cultural clings and distance between schools and settlements. Schools are few and scattered; Kibish sub-county which boasts as the largest sub-county in the northwest part has only 15 primary schools and 1 secondary school in the whole sub-county (Turkana County Government, 2019). Distance could hinder efforts to inclusive education thus the need for upscaling mitigation measures.

KIPPRA (2024) alluded that the use of technology could help increase literacy among the marginalized arid and semi-arid regions, however, KIPPRA noted the wide digital divide, especially within the marginalized communities that needs to be addressed to improve the integration of technology in learning, noting that 70 per cent of school going children live in the rural areas. KIPPRA recommended that marginalized communities should be taken through education awareness programmes so that they can release children to schools. Inscow's (2020) study on promoting inclusion and equity in education lessons from international experiences found that across the regions of the world, there is increased interest in making education more inclusive and equitable with the need for more action to move policy into practice. Thus, with documented evidence through practical research evidence of this study, robust policy implementation could lead to effective inclusion.

Theoretical Framework

This study was premised on Bandura's Social Learning Theory propounded by Eysenck (1999). The main assumptions of this approach are that learning comes from the surroundings and the environment and that experiences shape the person's behaviour, attitudes and beliefs, and hence his/her personality. Eysenck (1999) as cited in Wamocho (2003) points out that personality research is suggestive of the fact that we human beings have a certain sort of personality, that is stable and an enduring condition. He further suggests that our personality is part of our nature and hence there is a biological basis for it, that is, it is innate. However, others suggest that nature also affects personality for example, we learn through reinforcement: - thus we tend to repeat behaviour for which we have been rewarded and tend to avoid behaviour for which we have been punished. We use others around us as a reference point and learn from them. Bandura's Social Learning Theory thus suggests that we develop as individuals, through learning and socialization. People have to be helped to "socialize" and in the process learn from the wider society, a prototype

of which is the inclusive school setting. Thus, the creation of an enabling environment in schools or the creation of a barrier-free environment by addressing what causes exclusion such as long distances to schools, the migratory nature of the pastoralists and poverty would enhance inclusion. Therefore, the adoption of Bandura's social learning theory as an element of this study's theoretical framework finds justification in terms of its advocacy for the creation of an enabling learning environment as an important medium for inclusive education in nomadic pastoral Turkana.

RESEARCH METHODOLOGY

The study employed a multi-method approach using descriptive survey and correlational research to address the macro and micro-level context of inclusive education. The macro-level approach involved a critical review of policy documents and literature that shaped the dimension of inclusive education in the country and within the nomadic pastoralists; the global education agenda on equity and quality sustainable education and the national policy on education for all. At the micro level, the study selected four sub-counties where the nomads dwell. The four sub-counties are; Kibish, Loima, Lokirama, and Turkana West. The sub-counties were selected purposively taking into account their location of an interior dwelling where the nomads usually move to pasture their herds. At the micro-level, the head teachers and the sub-county director of education were targeted within the four sub-counties. An inventory of the educational infrastructure; schools that were operational within each sub-county and enrolment, human resources and distance per square kilometre was done to provide an overall status of education within the pastoralist nomads of Turkana.

Data was collected through physical administration of questionnaires to the school principals, document analysis and interviews. The study examined the status of educational resources and policy implementation strategies for inclusive education, and evaluated the implementation against the policy, funding

sources and gaps for upscaling to enable effective inclusive education.

Interviews were conducted with the four sub-county directors of education. The questionnaires were tested for validity through content validity ratio, where all 4 experts qualified the questions to be relevant to the study objectives. The questionnaires were administered to the 48 head teachers of primary schools. In the process, analysis of relevant documents and policy frameworks was done. Contacting relevant institutions was done and the survey was rolled out. Interviews enabled corroboration of data on the documents reviewed. Quantitative data was analyzed using descriptive statistics for means and percentages. The effect of school status on inclusive education was established through inferential statistics; regression analysis by model stepwise regression formula $\{\hat{Y} = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon\}$ was adapted (Keller, 2014).

While interviews were analyzed thematically, responses were linked to specific questions and

objectives and interviews on saturated responses were deemed to have supplied sufficient responses.

FINDINGS

Micro-level Status of Inclusive Education

Inclusive education entails engaging frameworks that enable equity in accessing education by all. Putting in place the regulations that ensure access and retention in schools, mainstreaming education with the support of specialists and also partial integration of learners with manageable special education needs within the regular classrooms for comprehensive accessibility (Lucy & Orodho, 2022; Ireri et al., 2020). This research shows that the findings are anchored on evidence research.

Information was supplied through a questionnaire by the school head teachers on the number of teachers in their schools. Table 1 shows a summary of the number of teachers in primary schools within four sub-counties of Turkana.

Table 1: Number of Teachers in Primary Schools Within the Four Sub-Counties of Turkana.

Sub County/ No. of teachers per school	Loima	Kibish	Lokiriana	Turkana West	Total	Percent
1 to 3	28	2	10	36	76	50.33
4 to 6	25	10	0	18	53	35.09
7	5	2	2	4	13	8.62
8	7	1	0	1	9	5.96
Total	65	15	12	59	151	100.00

Source: Head Teachers Questionnaire

Table 1 shows that about 50% of the schools in Turkana county have between 1 and 3 teachers per school. While 35% of the schools have between 4 to 6 teachers per school and about 14% of the schools have 7 teachers and above per school. This implies that in 50% of the schools, at any given lesson time, three classes are unattended, a lesson being 35 minutes and a day has six lessons would mean that 18 lessons are unattended by teachers per day thus 630 minutes are wasted per day in the classes not engaged by teachers due to teacher shortages in the schools. Many learners

are unattended at any given running lesson. This mapped per sub-county is atrocious as many learning hours are being wasted. This could explain the reason for low participation in education in Turkana and beyond. This finding corroborates Lucy's (2022) finding on learning hours and learning output, that the more a teacher engages learners in learning the better the learner grades, which was seen in science practical grades going up due to more learning hours in the laboratories.

Table 2 Distribution of Teachers in Loima Sub County

Number teachers per school	Frequency by School	Percent	Valid Percent
1 to 3	23	31.9	54.2
4 to 6	32	44.4	39.0
7 to 8	5	4.2	5.1
Above 8	2	1.4	1.7
Total	61	81.9	100.0

Source: Head teachers' questionnaire

Table 2 shows that the majority of the schools have between 4 to 6 teachers at 44.4% in Loima sub-county. About 23 schools that is 31.9% of the schools have between 1 and 3 teachers. About 5 schools have that is 4% of the schools have between 7 to 8 teachers, and only 2 schools have 8 teachers and above.

The findings imply that only 2 schools which is about 1% of the schools in Loima sub-county will

have a teacher in all the classrooms at any given lesson time. All the other schools will have at least two classes unattended at any given lesson time because an average of 4 teachers per school in the remaining about 75% of the schools in the Sub-county can only attend 4 out of 6 classes from grade one to six. There was an inadequacy of teachers in the schools within the sub-county.

Table 3 Number of Teachers in Primary Schools in Kibish Sub County

Number teachers per school	Frequency	Percent
1 to 3	0	0.00
4 to 6	14	93.33
7 to 8	1	6.66
Total	15	100.0

Source: *Head teachers' questionnaire*

The sub-county has a fairly adequate number of teachers as 93.33% of the schools had between 4 to 6 teachers which implies that nearly all the classes would have a teacher attending to the

learners at any given lesson. However, there is still a need for more teachers to attend to other school duties for seamless administration and leadership.

Table 4 Number of Teachers in Public Primary Schools by Sub-County

Sub-County	Number of schools	Number of teachers	Minimum	Maximum	Mean
Loima sub-county	65	243	3	4	3.5000
Turkana West	59	223	3	3	3.0000
Kibish	15	95	5	6	5.5000
Lokirama	12	40	3	7	3.0000
Total	151				

Kibish sub-county has the highest number of teachers per school at an average of 5 teachers. Turkana West and Lokirama have the lowest number of teachers at an average of 3 teachers per

school. Loima has an average of about 4 teachers per school. An average of three teachers per school against six classes and five subject loads per class implies a severe teacher shortage in the

Arid rural pastoralist Turkana. The lessons running unattended by a teacher due to teacher shortage is a form of exclusion.

Table 5. Mean Enrolment in Primary Schools by Sub-County

Sub County	N (No. Of Schools)	Minimum	Maximum	Net Enrolment	Mean Absenteeism
Loima	65	Between 10 To 20	40	25	5
Kibish	15	Between 10 To 20	30	15	3
Lokirama	12	Between 10 To 20	30	12	3
Turkana West	59	Between 10 To 20	40	24	5
Total Average	161		37	19	4

Table 5 shows that all the schools within the county are within the required class size of 40 pupils per class. This could imply quality teacher-pupil engagement. Nonetheless, an average of 4 learners were always absent at any given time in a class of 19 pupils on average. However, this manageable class size could be confounded by the

inadequate number of teachers in the majority of the schools as shown in Table 1.

Table 6 presents the distance between schools, the data was supplied through document analysis to help determine if the distance covered has an effect on inclusion. The information is presented in the following table.

Table 6. Distance Covered to School by Sub-County

Distance	Kibish		Loima		Lokirama		Turkana West		Total
	F	%	F	%	F	%	F	%	%
Below 10 km	0	0.0	14	21.54	0		4		11.92
25 to 35	5	33.33	51	78.46	4	33.33	22	40.07	54.30
35 to 40 km	9	60	0		8	66.67	33	59.93	33.11
Above 41 km	1	6.67	0		0		0		0.67
Total	15	100.0	65	100.00	12	100.00	59	100.00	100.00

Table 6 shows that Kibish Sub County had fewer schools at only 15 and the largest distance variance between the schools. This is because 60% of the schools within Kibish Sub County had an average of 40km between one school and another. Loima sub-county is the second after Kibish as the sub-county suffers huge distances between one school and the other between 35km and 40 km. About 78.46% of the schools are

affected by huge distances. The large distances imply that learners could be covering about 20 km going to school and 20km coming home from school, thus 40km per day. This could discourage frequent attendance at school. Further, in Lokirama and Turkana West sub-counties, about 60% of the schools are 40km apart. The average distance between schools within the sub-counties is about 30km.

Table 7 Influence of School Distance on Absenteeism

		Unstandardized coefficients		Standardized coefficients	Std. Error of the Estimate	
Model		R	R Square	Adjusted R Square	B	Beta
1		1.000 ^a	1.000	1.000	-2.000	1.000
Predictor:	Average Distance between schools					
Dependent Variable:	Average absenteeism					

Table 7 shows data on a correlation between distance covered to school and learner absenteeism in Kibish sub-county in Turkana. Pearson's R= 1.000 indicates that there is a perfect positive linear relationship between distance covered to school and learner absenteeism in primary school sub-counties, Turkana County. The R-Square yielded 1.0000, suggesting that distance covered explained 100 per cent of learner absenteeism in schools thus the main cause of absenteeism. The Beta value of 1.000 predicted that a unit increase in distance covered to school causes a 1.0000 increase in learner absenteeism. The standard error of .0000 shows that there are no other factors to explain absenteeism.

This finding was corroborated by the interview of a sub-county director who confirmed that:

"The distance from one school to another is over 40km especially in Kibish Sub- County which hinders learners whose settlements are in between the schools from accessing the. This calls for more low cost schools to absorb them in boarding schools because a mainstream day school may not be planted for such learners since they are scattered over the pastures".

Gross Enrolment by Sub-County

This information was required to help establish access issues in the sub-counties. The information was supplied by the school head teachers in the questionnaires and corroborated with analysis of documents and class registers. Data was recorded in Table 10.

Table 8. Mean Class Enrolment by Sub-County

Sub-county	No. of schools	Minimum Enrolment	Maximum Enrolment	Mean Enrolment
Loima	65	18	46	33
Kibish	15	15	30	15
Lokirama	12	11	28	13
Turkana West	59	16	44	31
Total Average	161	15	37	23

Table 8 shows that the average class size of 23 in the four sub-counties is still below the standard class size of 40 pupils per class (Republic of Kenya, 2018). Loima sub-county has the most populous class at an average of 33 pupils per class, followed by Turkana West at an average of 33 pupils per class, then Kibish at an average of 15 pupils per class and finally Lokirama at an

average of 13 pupils per class. This implies that school resources could be underutilized especially classrooms which contain less than the required number of pupils per class. This also implies greater teacher-pupil attention as a teacher attends to fewer learners within a standard teaching time of 35 minutes per lesson as compared to when the standard class size is met.

Influence of Distance to School on Enrolment in Turkana County

conducted between distance covered and class enrolment. The results are presented in Table 11

To establish the influence of distance covered to school on enrolment, regression analysis was

Table 9: Distance to School and Enrolment

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1 Predictor: Average Distance covered to schools in Dependent variable: Average Enrolment Turkana	.258 ^a	.067	-.011	.51

Table 9 shows that Pearson's $R = .258$ suggests that there was a weak linear relationship between distance covered to school and enrolment. The R square of .067 implies that distance covered to school explained only 6.7% of the variations in class enrolment. The standard error of .51 suggests that there were other factors not observed by the model but had some influence on learner enrolment and could explain the variations in enrolment in the primary schools in the County.

This finding was corroborated by a Sub County Director of Education, Turkana, through an interview and said that;

Many school-going children are not enrolled in schools because they follow their parents to

pasture lands for pastoralism and keep on moving from one pasture area to another. Even the ones enrolled in schools also in most cases are absent from schools, especially during the period when there is not enough food at school, at any given time 3 to 4 pupils are absent out of an average class enrolment of 20.

The forty (48) head teachers were supplied with a questionnaire and asked to tick strategies they consider appropriate to upscale inclusive education within their locale. The teachers were allowed to tick more than one strategy.

Table 10. Strategies for Upscaling Inclusive Education

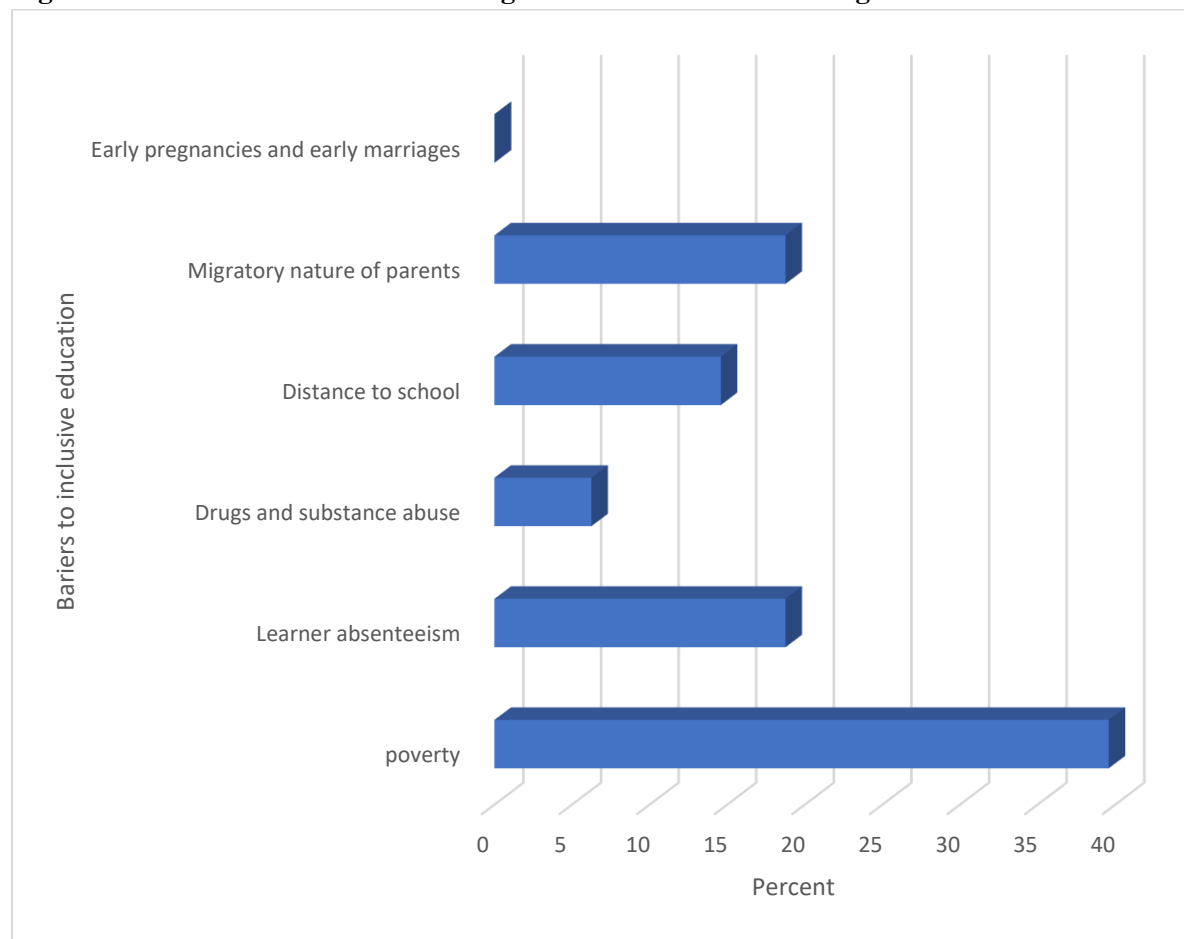
Strategy	Frequency	Percentage
Use mobile schools for children in the pasture lands	39	81.25
Implant more schools to reduce the distance covered to schools	18	37.5
Provision of adequate school meals	39	81.25
Sensitize parents on the importance of education by the local beneficiaries of education	38	79.17
Introduce a compulsory subject on modern pastoralism	33	82.5
Use technology learning within the mobile schools and regular schools as realia to expose learners to modern world living for motivation and relating it to education	26	68.75

Table 10 shows that the use of mobile schools and school meals are key strategies for achieving inclusive education in the locale, generating 98% preference, which could help upscale inclusive education in schools within pastoralist communities. These strategies can be implemented by employing a ratio because all of them are anticipated to lead to improved education inclusion in the region. These could be seen as principles to inform education policy under special considerations among the pastoralists. Inscow (2020) indicate that equity and inclusion principles should inform all aspects of educational policy.

This finding was affirmed by the data from interviews with a sub-county director who said that;

“distance between schools and homes hinders access to education since some pupils still have to cover a distance of more than 3km to reach school, thus, to and from school a total of more than 6 km per day when cumulated for a term may not be attainable by the young learners who consequently decide not to go to school”

Figure 1: Selected Barriers to Achieving Inclusive Education Among the Pastoralist Nomads



In regards to barriers to achieving inclusive education, Figure 1 implies that poverty is a major hindrance (39.58%) to the realization of inclusive education among the pastoralists, this is followed by the migratory nature of the pastoralists and learner absenteeism at 18%. The fourth position is the distance to school at 14.58%, drugs and

substance abuse at 6.25% and the least contributor to exclusion as suggested by the head teachers is early pregnancies and early marriages at .02%.

This information was corroborated by interview outcome from a sub-county director of education who said that;

Some learners have to walk long distances to schools hence on some days they choose to be absent, this makes the learners vulnerable to early pregnancies, marriages and also drugs; wasting away their future. Low-cost boarding schools could be increased especially in my region to accommodate more students and help them escape from the ills which may befall them in the community.

The key finding from the interview data was that long-distance trekking by learners to school discourages them from regular school attendance causing absenteeism thus making them exposed to drugs, early pregnancies and marriages.

DISCUSSION

Effective inclusive education is influenced by barriers to inclusion that are mostly within the considered populace and then prescribing measures to address the barriers. The four sub-counties that participated in the study have some common features that hinder inclusion, these were found to include; extreme poverty conditions which meant that the children also help to join hands in looking for food by herding animals; the migratory nature of the people as they look for pastures for the animals, parents withdraw their children from school and move with them to new pasture lands, this has been a long factor exacerbating the efforts made towards achieving inclusive education. The migratory nature of the people is a major cause of non-enrolment in schools.

There is a need to establish sustainable measures to ensure long-term settlement of the people for children to attend school regularly and the heightened interest in inclusive education fuels greater interest in finding solutions for Turkana county as among the counties worse affected by the high number of out-of-school population (Cars & West 2015, KIPPRA, 2020)

Inclusive education would be realized with the joint effort of the education stakeholders mainly the community, government and teachers and also students (Akinyi & Orodho 2014; UNICEF, 2015; Turkana County Government, 2019). There are

factors which if considered, could enhance inclusive education and this study's findings show that the use of mobile schools along the pasture routes and the provision of adequate food at school are the main strategies that would upscale the achievement of inclusive education. Also, modern pastoralism if introduced as a subject taught in schools within the pastoralism communities, would improve school attendance. The world is adopting the use of ranches away from urban centers and pastoralist communities and the governments could adopt this to bring the cultural praxis into modernism. Continued sensitization of the pastoral communities on the benefits of education by their own role models could spur school enrolment.

Education is the key that will allow many other Sustainable Development Goals (SDGs) to be achieved. When people are able to get quality education they can break from the cycle of poverty. Education will help to reduce inequalities brought about by poverty and cultural marginalization and empower sustainable lives. Education is also crucial to fostering tolerance between people and contributes to more peaceful societies. Thus, to deliver inclusive education, the government must make financing education a national investment priority by measures such as making education free and compulsory, increasing the number of teachers, improving basic school infrastructure and embracing digital transformation (UNESCO, 2020; UNICEF, 2015).

CONCLUSIONS

The region still is lacking in accessible infrastructure that could enhance inclusion. In essence, developing appropriate infrastructure and reducing the distances learners have to walk from home to school is a factor for consideration for effective inclusion. Kibish sub-county suffers the largest distance of about 40 km between schools thus, intervention measures for inclusion should give Kibish the needed attention. There is a severe teacher shortage in the pastoralist regions which exacerbated the exclusion as many classes remain idle even while in schools as the few

teachers attend to other classes. This is a threat to inclusion.

Recommendations

- The government to allocate adequate resources to cater for more accessible infrastructure to both regular learners and to persons with disabilities.
- The government to employ more teachers to alleviate the severe teacher shortage and increase the teacher-pupil ratio for effective class engagement.
- The government to supply adequate free meals to cushion all learners from perennial hunger so that they do not retreat back in the pastures due to shortages at school. This will equally enhance equity in learning.
- The government to introduce mobile schools to definite pasture routes to take care of sprouting settlements in the pastures. The teachers are to be designated for mobile schools attached to mainstream schools for coordination purposes. In this pursuit, the learners are clustered by ages; 6 to 9 and 10 to 14 and are taught distinct content by grade on a rolling basis, thus a multi-grade approach.
- Integrate technology in learning in the mobile schools to expose the children to the simulated modern way of life, relating it to education for motivation to learn.
- Increase the number of low-cost boarding schools to create room for more children to be accommodated in the boarding section. This will also cushion the pupils who will transition from the mobile schools to low-cost boarding schools so that there shall be no relapse back into the society because, after grade three, all the pupils from the mobile schools should be enrolled in the low-cost boarding schools. This will ensure sustainable inclusion as it enhances the seamless transition to other levels of learning through structured processes.

- The curriculum is to be tailored to incorporate modern pastoralism as an additional mandatory subject area to be taught to pastoralist communities thus a consideration of cultural praxis.
- The pastoralist nomads are to be continuously sensitized on education and its benefits so as to increase awareness for full inclusion.
- The government to form a monitoring and evaluation committee to oversee the implementation of strategies for inclusive education among the pastoralist communities. This will ensure effective implementation.

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