



The Education System in Karamoja

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Executive summary

Karamoja is a sub-region of Uganda, where decades of brutal conflict and a harsh, arid climate have contributed to some of the worst poverty indicators in the world. Of the households there, 80% are food insecure, unemployment is above the national average and the vast majority of children live in poverty. However, in recent years, disarmament has restored peace and the region has attracted significant foreign investment. Hoping to benefit from these opportunities, many Karamojong are now seeking alternative livelihoods to traditional cattle rearing. Many have settled in permanent or semi-permanent villages and want education and economic opportunities for their children and youths.

Education is a basic human right as well as a means of reducing poverty; yet Uganda's education sector faces many challenges, including high levels of teacher and student absenteeism, weak school management, inadequate learning materials and large class sizes. There are not enough teachers in disadvantaged districts or accommodation for teachers in hard-to-reach areas. All these factors contribute to persistently low enrolment and poor quality education. Lack of flexible alternative education opportunities compounds the challenges of access and completion in Karamoja, as does the low value attached to education—especially for girls—by some communities.

Karamoja still suffers from some of the worst educational achievements and performance in Uganda, owing largely to poverty and the protracted conflict that marginalised the region and stalled its development for decades. Other factors are social, cultural and economic, including the Karamojong's nomadic lifestyles, which made it hard for them to access formal schools in fixed locations. Moreover, the education offered in formal schools was ill-aligned to the values, culture and lifestyle of the Karamojong, rendering it inconsequential to their lives and livelihoods.

The launch of non-formal education programmes in Karamoja in the late 1990s aligned the content and delivery of education to the lifestyle and needs of the Karamojong. Although the current education strategies of the government remain ill-aligned to the needs of the Karamojong, both formal and non-formal education programmes have grown in the region and have increasingly been taken up by communities. As communities in Karamoja shift to agro-pastoralism and begin settling in more permanent villages, the demand for formal education is rising, as is enrolment, especially in primary schools. From 2005 to 2016, both Universal Primary Education (UPE) and Universal Secondary Education (USE) enrolment increased faster in Karamoja than at national level. This trend in the demand for education in the sub-region will require a commensurate supplyside increase in the coming years.

A large number of external partners work in the region, but coordination remains weak. Projects are fragmented, resources are unevenly distributed and funding does not meet the needs of individual districts or the region as a whole. Many interventions are not based on the needs or desires of districts, but rather on the interests of the implementing partners. Education data is poorly collected and disseminated by both government and civil society. Knowledge management and sharing is limited.

Hence, Karamoja's education indicators for net primary enrolment, primary completion and pupilto-classroom ratios still rank it in the bottom third of the country. To meet the challenges of providing an accessible and meaningful education for all children and youths in the region, the priorities are to ensure education service delivery keeps pace with growing demand and that both formal and non-formal education services are aligned to the needs and expectations of the community. The first step towards ensuring quality education for children in Karamoja is to increase access by improving infrastructure, facilities, safe learning spaces, numbers of teachers, supplies of appropriate teaching and learning materials, and bringing education services closer to communities. Better access will reduce the extremes of education inequity within the region related to gender, extreme poverty and disability. In addition, reducing the hidden costs of schooling and making education affordable for poor families is key to improving access and completion in Karamoja.

Enhancing teacher effectiveness, strengthening school management, assessing and monitoring learning outcomes, raising literacy and numeracy levels, reducing violence in schools, strengthening girls' education and promoting peacebuilding and conflict-sensitive education are critical to quality, as are access and equity. Initiatives must also address the sociocultural practices that continue to undermine inclusive and quality learning. Accepting that most children will not complete a full education cycle, it might be useful to develop further alternative forms of education that would fit the needs of the Karamojong. One example could be accelerated learning programmes for primary and secondary students; another might entail supplementing the national curriculum with initiatives that help children acquire practical skills while receiving basic formal education, to ensure that students leave school with sufficient skills to make a decent living.

Whole school models can also help schools in Karamoja get the support and resources they need to be successful, including promoting safe schools and spaces, school governance, teacher training and parent and community advocacy and engagement. Karamoja might also benefit by redefining school success in a way that would help it match supply and demand and promote access and quality.

Sustainable investments are critically needed to align strategies to evolving needs, support district, regional and national coordination, improve data collection and management, and engage citizens in sustaining improvements to the system. A multi-sectoral systems strengthening approach, including health, agriculture, social welfare and gender, would help sustain gains in education.

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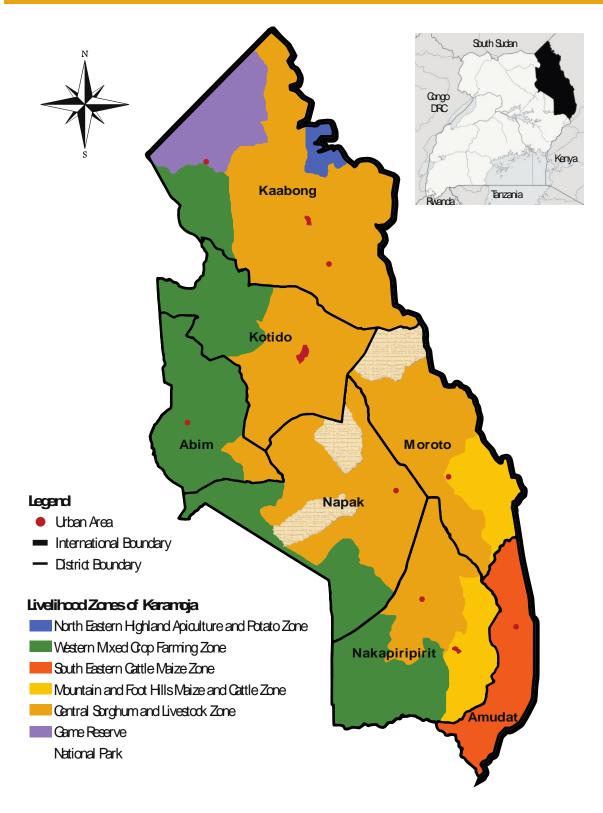
List of abbreviations

ABEK	Alternative Basic Education for Karamoja	
ABER-K	Addressing Barriers to Enrolment and Retention in Karamoja	
ADRA	Adventist Development and Relief Agency	
BTC	Belgian Development Agency	
BTVET	Business, Technical and Vocational Education and Training	
CSO	Civil Society Organisation	
ECD	Early Childhood Development	
ECDE	Early Childhood Development Education	
EGRA	Early Grade Reading Assessment	
ESSP	Education Sector Strategic Plan	
GOU	Government of Uganda	
GPE	Global Partnership for Education	
KDPG	Karamoja Development Partner's Group	
KIDP	Karamoja Integrated Development Programme	
KIDDP	Karamoja Integrated Disarmament Development Programme	
KOICA	Korea International Cooperation Agency	
MDGs	Millennium Development Goals	
MOES	Ministry of Education and Sports	
OPM	Office of the Prime Minister	
PEAS	Promoting Equality in African Schools	
PLE	Primary Leaving Examination	
PRDP	Peace, Recovery and Development Plan	
PTC	Primary Teacher's College	
SAGE	Strengthening Access to Girls Education	
SESIL	Strengthening Education Systems for Improved Learning	
SHRP	School Health and Reading Program	
UBOS	Uganda Bureau of Statistics	
UCAE	Uganda Certificate of Advanced Education	

UCE	Uganda Certificate of Education
UPE	Universal Primary Education
USE	Universal Secondary Education
UTSEP	Uganda Teacher and School Effectiveness Project
VSO	Voluntary Services Overseas
WFP	World Food Programme



Map of Karamoja's Livelihood Zones



1 Introduction

The specific objectives of the education assignment were to:

- review evidence and historical accounts of what works to provide meaningful education in Karamoja from pre-primary level up to secondary level;
- analyse administrative and performance school data from Karamoja together with population data to understand the existing (mis)match between demand for education and current capacity at primary and secondary; and
- recommend where and how DFID Uganda could most effectively add value to existing government and donor efforts in education in Karamoja, building on the plans set out in the Strengthening Education Systems for Improved Learning (SESIL) Business Case.

In keeping with the above, the contents of the paper are based on a desk review of relevant literature, including evaluations, historical accounts, and programme reports on efforts and interventions to improve access to education and the quality and relevance of education outcomes achieved in Karamoja for early childhood development, primary and secondary education. It also includes analysis of key informant interviews conducted with national and district education officials, donors, NGOs, and academic and community stakeholders in Kampala and Karamoja from February to April 2017. Finally, it includes direct observation of the education system and teaching and learning in schools and communities in Karamoja, as well as dialogues with school leaders, teachers, parents and community members about education access and quality in Moroto, Kotido, Napak and Nakapiripirit Districts in Karamoja in March and April 2017. Findings and suggested areas for further interventions were validated with district education and political officials in April 2017 through a workshop in Moroto Town.

This paper analyses the sociocultural and political context of Karamoja and its impact on education, and historical and current initiatives to improve access to education in Karamoja. It defines what constitutes a meaningful education in Karamoja and examines the supply and demand of education services there, with a particular focus on the functioning of the education system, and identifies possible interventions to improve uptake and completion of a meaningful education for today's children and youths. It concludes with a set of recommendations for where DFID can add value to the existing efforts of the Government of Uganda (GOU), multilaterals, bilaterals and Civil Society Organisations (CSOs), within the parameters of its new education programme in Uganda from 2017 to 2021. The analysis is intended to stimulate discussion among DFID and other stakeholders to identify relevant initiatives to improve education service delivery and quality in the Karamoja region over the next five to ten years.

2 The sociocultural and political context in Karamoja and its impact on education

2.1 The sociocultural and political context in Karamoja

Uganda's history of state formation and the conflict in the northern regions have had a significant impact on the country's development and growth. Since 1986, Uganda has experienced at least seven civil wars, mostly in the northern regions. In 2017, Uganda was ranked 23rd globally on the Fund for Peace list of fragile states, (http://fsi.fundforpeace.org, 2017).¹

Across the country regional instability persists, driven by economic disparities and unequal distribution of wealth, resource competition, land disputes, cattle raiding, poor governance, the politicisation of ethnic identities and corruption—all of which have a direct effect on the delivery of services like education to populations across the country, and most notably across the northern regions.

The Karamoja Sub-Region, located in north-eastern Uganda and bordering South Sudan and Kenya, is the most impoverished region of the country and remains extremely vulnerable to shocks related to security and conflict, the climate and environment, politics and health. It is divided into seven administrative districts: Kaabong, Kotido, Moroto, Nakapiripirit, Napak, Abim and Amudat. Karamoja is home to a traditionally nomadic pastoralist population from Uganda, Kenya and South Sudan, and clashes within and along these borders continue, although much less frequent than in the past. Recently, issues of land rights and illegal or exploitative mining activities have threatened sustainable development and peace. Harsh climatic conditions annually affect reliable crop production, and the population depends overwhelmingly on pastoralism and agro-pastoralism for its survival. Unreliable patterns of rain in past years have led to widespread drought and hunger. Traditionally, the Karamojong have adapted to harsh living conditions and climate changes by focusing on livestock production, including cattle, goats and sheep. The search for pasture and water is men's responsibility; they move with the herds, often to distant locations across districts and even borders (Datzberger, 2016).

Following the end of colonial rule, the borders between Kenya, Sudan and Uganda were redrawn. The majority of the Karamojong's grazing regions were left outside Uganda, causing several crossborder conflicts among different ethnic groups (Crawford and Kasiko, 2016). Starting from the 1970s, Karamojong, Kenyan and cross-border pastoralists (including the Turkana and Pokot tribes), acquired modern firearms, which increased the momentum for cattle raiding and violence in the Karamojong Sub-Region. Forceful attempts by the Ugandan government to disarm and settle Karamojong pastoralists have resulted in decades of conflict, human rights abuses and widespread poverty (Datzberger, 2016). The current disarmament programme began in 2002 and ended in 2013 with the establishment of peace committees in villages across Karamoja. Since then, relative peace and a growing stability have come to the region.

Today, Karamoja still displays the highest multi-dimensional poverty index in the country. Severe poverty affects 79.1% of people, compared to the 38.2% national average (Datzberger, 2016).

¹ The Fragile States Index (FSI) is an assessment of 178 countries based on twelve social, economic and political indicators that quantifies pressures experienced by countries, and thus their susceptibility to instability. It is based on the Fund for Peace's Conflict Assessment System Tool (CAST), which was developed in the 1990s as a framework for policymakers and field practitioners to be able to better understand and measure conflict drivers and dynamics in complex environments. The FSI highlights not only the normal pressures that all states experience, but also identifies when those pressures outweigh a states' capacity to manage them. By highlighting pertinent vulnerabilities which contribute to the risk of state fragility, the FSI makes political risk assessment and early warning of conflict accessible to policy-makers and the public at large. Accessed from http://fundforpeace.org.

Poverty rates for children aged 0–4 are highest in Karamoja, where 68% live in poverty. For children aged 6–18, the percentage of those living in extreme poverty is even higher at 82% (UNICEF, 2015). The region suffers from several forms of structural violence, horizontal inequalities and unequal opportunities. Karamoja, however, is rich in two assets: cultural diversity (the area boasts tribes from Kenya, Uganda and South Sudan) and mineral resources. Resource exploitation and land acquisition by mining companies have, however, increased structural violence and the frequency of human rights violations. Among other impacts, the poor provision of education for the Karamojong affects their ability to advocate for their rights in the face of such resource exploitation. Remote communities lack educated individuals to express their wants and needs and to formally engage in the new livelihood activities and businesses offered by the mining sector (Datzberger, 2016).

Due to the history and environment of Karamoja, the majority of the population—women, girls, men and boys—lives with extremely high levels of vulnerability. Over a century of conflict and marginalisation from the central government have left the Karamojong at a severe disadvantage; as a result, the sub-region is significantly underdeveloped compared to the rest of the country (Crawford and Kasiko, 2016). Poorly designed and executed colonial and post-colonial political and economic policies towards pastoralists did not greatly affect the traditional cattle raiding strategies of the Karamojong, but they did increase political and territorial boundaries and tensions, which have played a strong role in changing the structure and function of traditional livelihoods (Gray, 2000). There has been a growing dependency on food aid across Karamoja for over 40 years. Environmental shocks due to climate change have entrenched this dependency (Crawford and Kasiko, 2016).

A report commissioned by DFID in 2016 to strategically review the organisation's work on gender equality and women and girl's empowerment in Karamoja found that:

- 'the sub-region is entrenched in social dislocation and "cultural depression";
- traditional ways of being, and traditional livelihood strategies, are no longer functional—yet there is little, apart from aid dependency, to replace them;
- people have lost their traditional roles and purpose; and
- inequitable power relations and discriminatory cultural norms are the foundations for gender inequality. The values, attitudes and beliefs of the Karamojong have led to disempowerment of men and boys, girls and women, and have failed to protect human rights for women, girls, men and boys throughout the sub-region' (Crawford and Kasiko, 2016).

The report also cited the challenge of low school enrolment of both boys and girls and low retention of girls in school due to the sub-region's unique social and political structure and challenges, as well as the generally low value placed culturally on a formal education.

Historically and today, climate change and ecological and environmental challenges have reinforced gaps in socioeconomic development among the Karamojong. Many research studies have found strong evidence that pastoralism remains the most sustainable means of survival for nomadic and semi-nomadic societies struggling to respond to the effects of climate change. 'This intertwined relationship between conflict, ecological degradation, underdevelopment and lack of education has been often referred to as the "Karamoja Syndrome", calling for solutions that fit the everyday contemporary realities of a pastoral community' (Datzberger, 2016).

It is important to understand this framework when analysing the education service delivery modality in Karamoja. 'The "Syndrome Approach" to systems research was developed in 1993 by the German Advisory Council on Global Change. It presents the genesis of the development predicament facing nomadic pastoralist communities against a network of interwoven and self-

perpetuating economic, social, ecological, cultural, demographic and political factors that keep a nomadic pastoralist society like the Karamojong permanently trapped in a vicious circle of deprivation. Overall, the basic structural features of the Karamoja Syndrome reveal a complex cycle of unsustainable development whereby ecological degradation, the destitution of social institutions—including education—and the impact of insecurity due to raids and conflicts reinforce one other, deteriorating traditional livelihoods and pastoral mobility and causing communities to resort to alternative livelihoods (such as firewood selling) with devastating environmental consequences. This dynamic has a serious and detrimental effect on the performance of various education modalities' (Ministry of Education and Sports [MOES], 2010).

The intertwined nature of the relationship between the different elements of the Karamoja Syndrome implies that a piecemeal approach to resolving the development challenges of Karamoja's nomadic pastoralist community cannot work. The solution to the education problems Karamoja faces must therefore be located in the context of the more global Karamoja Syndrome perspective: to improve the education system, corresponding improvements in health, livelihoods, poverty reduction, peace and security, economic empowerment and social protection must equally be improved for Karamojang communities to benefit from the services a better education system can provide.

Due to a number of factors including climate change, today's pastoralists in Karamoja are finding it increasingly necessary to supplement livestock-based activities through livelihood diversification (World Food Programme [WFP], 2016). According to a 2010 report by the MOES, Karamojong communities are increasingly settling in permanent or semi-permanent sedentary communities where they take up crop production and farming in addition to livestock rearing (MOES, 2010). To earn a daily income for buying food, women, girls and other youths also engage in activities ranging from hunting and gathering to the selling of firewood, charcoal, chickens and crafts, as well as block laying, the extraction of stone and brewing. As indicated in the map on Page 5, different regions of Karamoja engage in different types of crop production depending on the climate. Although much of central Karamoja and Amudat and Nakapiripirit Districts remain key cattle corridors, communities throughout the region are increasingly diversifying their incomes through crop production.

This shift from pastoralism to agro-pastoralism has its roots in the 1980s, when the region suffered from a severe famine where people lost their livestock and were forced to concentrate on farming to survive (Krätli, 2001). Although agro-pastoralists in Karamoja still engage in livestock-related activities, for many the core of their livelihoods are derived from crop production for food and income through crops like maize, sorghum and potatoes (Nkimba, 2009). As a result of these changes in livelihood and lifestyle, more people in Karamoja live in sedentary communities in areas where they can—and need to—access basic social services like education and health.

2.2 The impact of the sociocultural and political context in Karamoja on education

Education is widely seen as a fundamental human right as well as a catalyst for human and economic development, especially for people in the global South. This assumption hinges on the theory of 'education conversion'—the notion that education inputs or resources are directly converted into life improvements and human development. To a great extent this idea underpins education policy for developing countries, exhibited predominantly through international agendas and targets like the Millennium Development Goals (MDGs) and the Sustainable Development Goals (Greany, 2016).

Evidence suggests that Uganda as a whole has made significant strides in improving equal access to education over the past two and a half decades, in particular with regard to Universal Primary Education (UPE) and the enrolment of girls. After the launch of the universal primary school access policy in 1997, enrolment countrywide more than doubled, increasing from 3.1 million in 1997 to 7.6 million in 2003 (ODI, 2006). Uganda's national enrolment rate increased to 8,264,317 in 2015, translating to a net enrolment rate of 91% (MOES Statistical Abstract, 2015). The education reforms introduced were largely gender-responsive. More females than males were found to benefit from the government subsidy at higher levels of household income percentiles (ODI, 2006). Within 10 years, from 1992/03 to 2002/03, the enrolment of girls increased by more than 300% (FHI, 2015). At the regional level the impact was also significant. Across the northern region, girls' enrolment increased from 39.7% in 1992/93 to 72.5% in 2002/03, according to a 2015 study conducted by FHI 360's Education and Data Center. Despite this, while Uganda made great advances in increasing access to primary education and overall enrolment under the MDGs, it fell short of ensuring that children everywhere were able to complete a full cycle of primary education.

In Karamoja, implementation of the UPE policy did not result in similar widespread gains. Shortly after UPE was introduced, enrolment figures in Karamoja were just above 25%. Two decades later, the sub-region still has the highest percentage of Uganda's population with either no schooling or incomplete primary education—79.8% of all females and 64.8% of all males fall into these categories (Datzberger, 2016). In 2011, 62% of children aged 3–5 in Kampala were attending pre-primary school, while in Karamoja the figure was just 6% (UNICEF, 2015). According to a 2015 report by UNICEF, only one in every two children of primary school age (aged 6–12) in Karamoja attends school. Karamoja's primary Net Attendance Ratio stands at just 51%, compared to an average of 81% nationwide (UNICEF, 2015).

Karamoja also has the highest proportion of girls who are not in school or have never been to school across Uganda. Across the sub-region, fewer than one in every ten children attend secondary school (UNICEF, 2015). When comparing primary completion rates versus education releases per pupil—despite receiving the highest average allocations per pupil in the country—primary completion rates in the Karamoja Sub-Region remain the lowest nationwide (UNICEF Policy Brief, 2015). Overall, despite numerous efforts to close gaps in education access, multiple social, cultural and economic issues contribute to the poor uptake of education services among the greater Karamojong population.

Even when children are in school in Karamoja, they struggle to learn. The 2016 UWEZO reading and numeracy assessment found that pupils in Karamoja scored in the middle of the regional clusters in English reading scores (ranking 6th out of the 11 district clusters), below districts in central and western Uganda but above districts in West Nile, northern and eastern Uganda, which are also traditionally underserved (UWEZO, 2016). They scored lowest in numeracy assessments within all 11 district clusters (UWEZO, 2016). Across all categories of student performance and teacher and school quality, the northern regions, including Karamoja, generally scored the lowest. Findings from the School Health and Reading Programme's (SHRP) Early Grade Reading Assessment (EGRA), conducted in Karamoja in October 2016 in three districts (Moroto, Napak and Nakapiripirit), demonstrated some positive achievements among Primary 1 pupils in reading between children in the programme and those in control school. Learners in programme schools could read, on average, 6.3 letters sounds correctly, compared to learners in non-programme schools who read, on average, 1.9 correct letter sounds (SHRP Annual Report, 2016).

Karamoja is by no means the only sub-region in Uganda with low educational achievement, supply gaps and demand side barriers. It shares these realities with many communities across northern Uganda, which were part of the Ugandan government's Peace, Recovery and Development Plan (PRDP). Due to the north's history of protracted conflict, despite gains made under the PRDP,

performance is still far below national averages (UNDP, 2015). Developing Karamoja, like much of the north, still requires a paradigm shift to improve people's lives and enhance their capabilities and unlock the development potential of the region through long-term strategies and interventions, as this area is labelled a severely affected sub-region (UNDP, 2015).

At its core, education is ideological in nature and embedded in particular ways of thinking about human development in general, and pastoral development in particular. From a historical perspective of development policies, hardly any formal education interventions truly support pastoralism and offer any real development of educational possibilities for pastoralist communities. Today, governments and international organisations have become more aware of this lack and there is now more support for education programming to meet the needs of pastoralists within the formal and non-formal school system (Schelling et al., 2008).

The emphasis of these education programmes in Uganda is largely on the 'modernisation' of pastoralist communities for increased productivity, which has led to the development of specific education training programmes that encourage them to live a more sedentary lifestyle (Krätli, 2001). Under pressure, many pastoralists have sought alternative livelihoods to receive government support, engage in development and minimise the risks of climate change and climate shocks, while attempting to maintain their cultural practices and values (Schelling et al., 2008).

Today, many pastoralists worldwide—including in Karamoja—closely link formal education with personal, familial and community development, and many pastoralist communities have recognised that more traditional, community-based approaches to learning no longer equip their children with the full range of skills they require to be successful and earn an income in today's society (Schelling et al., 2008). Formal education has thus begun to play a bigger role in pastoral societies, which seek to benefit from the education system to participate in development and utilise what they learn in school to earn a living (especially basic literacy and numeracy) (Krätli, 2001).

In Karamoja today this presents a trade-off for parents having to make decisions on the schooling of their children, including accessing new opportunities for income generation outside pastoralism. Historically, however, school as a means of the sedentarisation and transformation of pastoralist communities has caused them to mistrust the education provided by the government (Schelling *et al.*, 2008). Traditionally, pastoralists in Karamoja feared that the education provided in schools was culturally distant (or even culturally aggressive), delivered in a foreign language in a foreign place that was not secure or welcoming for their children. Attempts to change this mindset towards education has therefore centred on ensuring that pastoralist groups believe the education they are being offered is an improvement to what they already have and will help them raise their standard of living (Schelling et al., 2008).

The high amount of domestic work and animal herding labour required from pastoralist children has often been a more important obstacle to them accessing education than population mobility (Krätli, 2001). If a child is needed for work, their parents may decline to send them to school in lieu of them working and contributing to the household. In most pastoralist homes, a range of tasks are regularly undertaken by children, including herding, watering, milking and domestic chores. Internationally, education is seen as a way to eliminate child labour in the majority of communities, who are taught to view work as a barrier to achieving education (UNICEF, 2015). Contrary to this, child labour in pastoral activities is often considered positive and useful, providing them with the critical knowledge and skills necessary to survive using their traditional livelihoods (Schelling *et al.*, 2008). Changing this mindset and helping communities view the type of education provided in formal schools as beneficial to their lifelong success and a means of improving their overall livelihoods has been identified one of the biggest barriers preventing the large-scale uptake of education services in Karamoja.

Pastoralist communities in Uganda have the most striking gender inequalities in terms of access to education. Girls in Karamoja commonly achieve far lower levels of formal education enrolment and achievement than boys (Crawford and Kasiko, 2016). Girls are often given more work and have less time to study; even at school they can be assigned to fetch water, clean the classroom or look after younger siblings they bring to school with them. In some cases, however, it is more likely that pastoralists will send their girls to school rather than their boys, at least at the primary level, because boys are more involved in animal herding (Krätli, 2001). Whether parents send their girls or boys to school therefore depends on their cultural and economic status (and economic thinking) (Schelling *et al.*, 2008).

Many respondents during the field exercise in Karamoja in March 2017 observed that gender inequalities in education relate largely to two factors: the distribution of child labour and community perceptions that educated girls are less valuable in marriage than educated ones, the former fetching a greater bride price due to their obedience and ability to perform traditional domestic tasks. Many brand girls who have gone to school as prostitutes and not considered 'marriageable material'.

However, as the decision to send one child to school and keep another at home is not usually based on any assessment of individual development, the choice is often not thought of by parents as favouring one child over another (Krätli, 2001). This should not be forgotten when examining the reasons for the lower enrolment of girls in formal education. In general in pastoralist communities it makes more sense to invest in the education of a boy (whose only economic value comes from labour), rather than risking the otherwise guaranteed income attached to a girl (the livestock gained when she gets married) (Schelling *et al.*, 2008). Girls nevertheless often make up the majority of children in non-formal education programmes in Karamoja, suggesting that assumptions about gender discrimination in decisions to send children to school can possibly be misleading.

A 2010 study commissioned by the MOES on alternative delivery models for primary schooling in Karamoja identified that the Karamojong have understood and embraced education in general, and realised that offering education to their children is beneficial. In Karamojong society, literacy and going to school are loaded with huge symbolic value, well beyond the direct benefit which may come from attending school, as education outcomes and learning gains are generally poor for the majority of children attending school in the sub-region. In a sense, going to school is often seen as 'hygiene of the mind, where ignorance is the dirt in which "diseases" like poverty and violence proliferate and learning is viewed as a cleaning process—cleaning from superstitions, from traditional beliefs, from one's past where development was restricted' (Krätli, 2001).

However, the poor quality of the schooling offered in formal institutions (which often leaves children with little by way of educational outcomes at both primary and secondary levels) can lead parents who do send their children to school to the conclusion that their children will not properly acquire relevant knowledge and skills through education and will be less likely to find a decent and well-paid job, as even after years of investment they will not possess the basic skills for literacy and numeracy. In this case, the availability of job opportunities post-schooling becomes equally important for the decision-making process as to whether a child is sent to school, and whether they remain in school once they are there.

Even if children achieve primary education in a place like Karamoja, the reality is that they often have little opportunity to acquire further education and training once they graduate. Secondary schools are not adequately available and the cost of secondary education is often far out of reach for the majority of households due to their extreme poverty. For many families, this presents a barrier to access and uptake of education services as it is seen as a limiting trajectory with no long-

term gains beyond primary school. For other families, however, even accessing and completing a primary education is seen as a critical first step to better participating in development and accessing future opportunities through basic knowledge of literacy and numeracy, regardless of whether a child can matriculate to secondary school. Over time, however, poor learning outcomes among children sent to school becomes an additional barrier to uptake, as low returns on education investment (i.e. children who are sent to school do not learn) can lead to fewer families willing to spend the little income they do have on sending children to school at the expense of having them contribute the family's income by working at home.

Although education is seen by some families as an escape from pastoralism (education personnel and community members interviewed in March 2017 confirmed this), other pastoralists use education as a safety net and as a way to diversify their pastoralist incomes (Krätli, 2001). Education in this context is seen as a way of accessing economic resources outside of pastoralism, especially for the growing number of households in Karamoja whose livestock and other forms of income-earning within their communities has declined, causing them to be increasingly vulnerable to poverty. In many of the communities visited during the field exercise, *kraals* were devoid of animals and the *manyatas* where the families lived showed little sign of food preparation and cultivation. According to the education personnel and community members interviewed, this is a tell-tale sign that many families are sinking deeper into poverty and dependence on foreign aid rather than relying on traditional livelihoods. For many of them, formal education for their children is seen as a possible route out of poverty and as a way to ensure they benefit from ongoing development in the region and country.

This evidence may suggest that, contrary to other common explanations, the rise in school enrolment figures over the last few years in Karamoja is likely in many respects to be an indicator of the increased vulnerability of pastoral households, rather than a sign of development or of a clear, increasing value placed on education and schooling. It could also mean that households are spending the little income they have on some form of educational investment, believing it will help lift them out of poverty. Following disarmament and the development of the region's education system, the rise in school enrolment could also be attributed to families believing it is finally safe(r) to send their children to school. It is likely to be a combination of all the above.

Education in the Karamoja context is therefore ultimately, and increasingly, seen as a way out of poverty or as a way of acquiring a set of skills (literacy, numeracy, etc.) that allows one to benefit from development and the country's progress—something many parents of school-age children have missed out on themselves. It is important to note that, due to climate shocks and hunger, this concept of education as a route out of poverty is even more entrenched in the function of schools as sites for free food distribution under WFPsupported school feeding programmes.

3 Historical analysis of interventions to improve access to, and the quality and relevance of, education outcomes in Karamoja

The Karamoja Sub-Region is characterised by low education outcomes, including low enrolment, attendance and completion. Community perceptions towards the education of their children are still described as 'cyclical', swinging positively and negatively against the need to meet household income and food requirements. Parents tend to release children for schooling only when household demands in terms of farming activities and fending for food have been met (Irish Aid, 2015). The poor socioeconomic situation of the region has resulted in large and widespread investment both for reconstruction and rehabilitation, as well as overall development outside of the education sector to improve the health and economic status of the population. Government, Development Partners and CSOs jointly support interventions in the social and livelihoods sectors. Investment in the education sector has been largely driven by sector development policies and strategic objectives, with interventions modeled along the region's specific needs and traditional barriers to education access and uptake.

The reasons cited for Karamoja's historically low formal educational attainment are deeply rooted in colonialism, which shaped the attitude of the Karamojong people towards education for almost a century (Datzberger, 2016). When British colonisers entered the region, they used pen and paper to impose taxes and write down the names of young men forcefully recruited to fight in the Second World War. The newly imposed tax system caused widespread poverty and most of the young Karamojong men who went off to fight never returned home. As a result, the pen was cursed and symbolically buried in the 1930s by the local community – a symbol of their outright rejection of formal education. To the Karamojong, education was synonymous with irrelevant knowledge that alienated the receiver from their traditional way of life and led ultimately to the loss of community members. Local folklore had it that children who went to a white man's school were destined to die an early and terrible death, banished from Karamojong society and declared an enemy of the people. The Karamojong elders ordered all children to abandon education and return home for ritual cleansing; foreign teachers were declared enemies and fought (Munaabi and Mutabaazi, 2006).

This process marked the nearly complete destruction of formal education in Karamoja for decades. Later attempts by colonial and post-colonial governments to reintroduce formal education were met with similar negative reactions by the Karamojong (Munaabi and Mutabaazi, 2006). Missionaries also met with the same negative outcome when they attempted to bring formal education to the region starting in 1929 with the Anglican Bible Churchmen's Missionary Society; later, the Catholic and Protestant missionaries began operating in the region with the same aim (Ward, 2014). Their goal was to spread Christianity and convert the local populations; their entry point was through both education and relief work. However, despite their collective efforts, both education and Christianity remained peripheral to Karamoja's pastoral society (Ward, 2014).

From 1960 onwards, most development projects introduced in the region followed a strict 'assimilation-through-modernisation' approach. In other words, education emerged as a critical development tool to bring people out of their 'backwardness' and pastoralist life (Krätli, 2001). The aim of this approach was to instil modern values and attitudes that would transform pastoralists into modern-day peasants. Education, it was hoped by western donors and local politicians, would convert nomadic populations like the Karamojong, who were largely involved in community and cross-border conflicts over land livestock and resources, into a settled and organised society. These efforts did not, however, yield the desired result of supporting sustainable development.

Attempts to settle and modernise the Karamojong instead nurtured local resistance and further aggravated conflicts between communities and the government (Datzberger, 2016).

However, as time went by, the Karamojong realised that in order to compete with the rest of Uganda, to participate in the larger society upon which they are dependent, they had to learn the knowledge and the language of outsiders. The determination and need for their own representation in Parliament, the desire to improve their life situation and life quality with better health care, absence of hunger and poverty as well as communication and interaction with the world outside Karamoja, required literacy skills (Nagel, 2001). The curse on externally provided education in Karamoja was lifted through the unearthing of the pen ceremony in 1995 during the launch of Karamoja's non-formal education programme, after which the benefits of Uganda's national education programme were slowly recognised (Datzberger, 2016).

However, even the introduction of tuition fee-free UPE in 1997 did little to fully convince the Karamojong elders to allow their children to go to formal school as the education offered did not align with their pastoralist lifestyle. The elders wanted non-native teachers, including foreign missionaries, non-Karamojong and non-Ugandans employed by either missionaries or the MOES, to listen to and learn from them (Munaabi and Mutabaazi, 2006). Most importantly, they wanted the outsiders providing the education services to understand their local experiences and challenges as cattle keepers and put in place a flexible system of education that was aligned to their pastoral and nomadic way of life.

The decision of pastoralist communities and parents regarding whether to favour strictly formal education, enabling children to engage in higher level training, higher level education and other skilling programming, or whether more emphasis should be placed on education that values culture and livestock production, depends on how education is understood and appreciated by the pastoralist communities themselves. In a sense, the decision depends on what the community perceive is meaningful about accessing an education in the formal system as opposed to an education derived from their traditional lives and livelihoods (Schelling et al., 2008). Some scholars argue that the Karamojong have never been resistant to education as such. Their centuries' old indigenous forms of education, rather moulded their children into good Karamojong. Pastoral education is therefore a utilitarian education—children learn as they produce results. The Karamojong rejected the formal school system because they never saw its practical benefit or value in helping their children to adapt better and make better use of their environment (Nagel, 2001). Formal education in a place like Karamoja is of limited economic value unless a child progresses well beyond primary school, because the region offers minimal chances of formal employment.

The decision about where to access and complete an education in the government system (whether it is formal or informal) is thus influenced by: 1) whether learning is seen as an investment for future security and income generation; 2) the type of school programming available and whether it aligns with the community's needs and expectations; and 3) perceptions regarding changing socioeconomic and livelihood conditions, which require traditionally pastoralist communities to go to school and gain the knowledge and skills necessary for them to succeed in an increasingly modernising world and benefit from the country's development. Research rarely looks at formal schooling (Greany, 2016). Historically, constraints to providing and accessing formal education in Karamoja have included:

 'the remoteness and sparse population of the area, making it difficult to retain qualified teachers, who are often assigned to teach in pastoralist communities from other regions of the country;

- rigid curricula in formal schools that is culturally distant and not relevant to the pastoralist way
 of life (instead focusing on the information needed to pass examinations, rather than the skills
 needed to succeed in life such as basic literacy, numeracy and transferrable or 21st century
 skills);
- a high labour demand from pastoralist children in general, and gender inequalities in child labour specifically for girls;
- insecurity that threatened schooling;
- poor job availability outside the livestock sector, which has slowed down the provision of secondary level education and post-primary training; and
- insufficient, inappropriate and difficult to access education infrastructure' (Schelling *et al.*, 2008).

Government support to the development of Karamoja emphasises the importance of achieving socio-economic transformation in the sub-region, which involves building on and understanding, rather than simply replacing, the existing way of life of the sub-region's pastoralist communities. There have been various efforts to respond to the educational challenges in Karamoja since UPE, with the aim of encouraging formal education among pastoralist communities. Due to the long history of conflict and unrest in the region, as well as dominant community attitudes towards formal education, little was done historically to promote quality education investments in Karamoja. Rather efforts have largely focused on improving education access through the construction of government schools and school facilities, as well as ensuring the appropriate staffing of teachers and equipping of schools with required teaching and learning materials.

Since 2001, the national policy for Karamoja has been defined as part of the disarmament framework, with development 'integrated' into the disarmament exercise. The GOU, through the Office of the Prime Minister (OPM), adopted the Karamoja Integrated Disarmament and Development Programme (KIDDP) as a medium term development framework tailored to address the unique context and development challenges in the Karamoja Sub-Region (OPM, 2007). The overall objective is to contribute towards human security and promote conditions for recovery and development in Karamoja as part of the broader National Development Plan and the Peace, Recovery and Development Plan (PRDP). The purpose of the KIDDP is to contribute to human security and promote conditions for recovery and development in Karamoja, as well as formulate a course of action that will define interventions by government and development partners to achieve a comprehensive and coordinated disarmament of the region as a precursor to enhancing sustainable peace building and development (OPM, 2007). A component of the KIDDP is focused on providing quality education for people in Karamoja. The KIDDP provides support for education in Karamoja to stop the "recruitment of young boys into warrior hood and encourage girls to stay in school" (OPM, 2007). In practice, this has translated into the construction of classrooms and facilities like dormitories and kitchen blocks in selected schools in the sub-region.

The GOU launched the PRDP in 2007. The primary goal of the PRDP is to accelerate poverty reduction and development in Northern Uganda and coordinate interventions for the rehabilitation and reconstruction of the region following decades of civil war and unrest. A component of the PRDP is focused on improving access to basic social services, including education. Like the KIDDP, this has largely translated into education infrastructure development and construction.

The GOU's Quality Enhancement Initiative (QEI) is modelled on the four pillars of pupils, teachers, management and the community and was adopted by the MOES and development partners in 2009 to refocus and commit additional efforts towards improving education indicators in the 16 worst performing districts in the country. Under the programme, district stakeholders are engaged in identifying problems and feasible solutions to education access and quality barriers, which are outlined in a district education development plan. The plans are then funded by various donors.

The QEI districts in Karamoja include Amudat, Kaabong, Moroto and Nakapiripirit, all of which have been supported by UNICEF. Activities to date have centred on facility construction and rehabilitation, teacher training, support to district education offices, improvements to the school inspectorate and School Management Committee training. To date, despite concentrated efforts to improve education indicators in these districts and some advances in education service provision, their performance still ranks far below other districts across the country.

The most significant of the education interventions focused on improving access to a quality, relevant education for pastoralist communities in Karamoja was developed by Save the Children and launched in 1995. The Alternative Basic Education for Karamoja (ABEK) programme offers an alternative non-formal basic education option to lead Karamojong children into the formal schooling system. The programme, with a curriculum designed in participation with the Karamojong and led by Karamojong facilitators, is designed to offer education at times and in places convenient and accessible to the Karamojong's pastoralist lifestyle. ABEK is also free for all children attending the programme, offering an attractive alternative to the hidden costs of schooling under UPE, where school tuition is catered for by the government while households cover the costs of school supplies, uniforms, feeding, transport and school development projects through fee schemes. The uptake of ABEK in Karamoja was quite successful, with over 200 centres operating across the sub-region when the programme was at its height.

A 2014 tracer study of ABEK graduates conducted by Save the Children found that the impacts created by the non-formal education programme were registered largely through changed attitudes among the Karamojong to embrace education (Save the Children, 2014). Increased literacy levels in children who attended the programme are believed to have opened doors for the success of other health awareness programmes, as beneficiaries found it easier to pass on important information. The study also found that former beneficiaries were involved in peace initiatives at the community level (Save the Children, 2014). The study reported that 47% of former ABEK beneficiaries never went to formal school after ABEK. Of those that moved on to formal education, 25% began but did not complete primary, while 12% completed primary and went on to secondary education (Save the Children, 2014).

While it is clear that the ABEK programme did not achieve one of its most important goals of transitioning children from non-formal education to the formal system, it did provide an alternative education accessible to children and communities that they appreciated and respected, as the skills and knowledge taught through the ABEK curriculum were grounded in the Karamojong pastoralist and agro-pastoralist lifestyle and culture. It also provided a basis for acquiring a certain basic, or functional, level of literacy and numeracy that allowed graduates to access non-traditional forms of employment. Many youths working in NGOs around Karamoja today are graduates of the ABEK programme (Field Visit Notes and Interviews, 2017).

A reason for the success of the ABEK programme was the location of learning centres close to communities. One of the greatest challenges to scaling up formal education access in Karamoja under UPE is that schools are often quite distant from communities, making children travel far each way to school. Communities believe this is unsafe and tiring for their children, so some refuse to allow them to attend school as a result. Moreover, the long distances and time required to walk to school takes children away from the livelihood activities needed for the family's daily survival to use that time for studying.

In response to these concerns, non-formal ABEK sessions were scheduled to suit the daily routines of children in their environment. ABEK's non-formal approach to providing basic education to children and youths also follows a flexible 'open door policy', inviting out-of-school youths and adults to participate in, and be part of, ABEK at any given time. The role of elders in Karamojong

society was also an important consideration when developing the ABEK programme, as without their approval little happens in Karamojong society. ABEK allowed elders from the community to attend lessons and participate in the education environment, which generated a feeling of trust and confidence in the non-formal system that contributed to its success. This model, quite different than the formal education approach that requires children to be consistently present in school and taught by government-approved teachers, also raised the attractiveness of the programme and made it more successful. An evaluation report by UNICEF stated that this 'collaborative participation of parents and their children in a learning activity generated a unique synergy in surmounting previous apathetic (and even hostile) attitudes towards education' (Datzberger, 2016).

Based on what was learned from the ABEK model, a meaningful formal school education for pastoralist and agro-pastoralist communities today has to consider the interconnections between access to education, mobility and livelihoods, the empowerment of girls and the different determinants of community and child participation in the formal and non-formal education system. The current formal education system imposes costs on households when sending children to school, despite supposedly 'free' educational provision, and good practice must seek to reduce the direct and opportunity costs to the livelihoods of the poorest peoples of educating their children to raise the attractiveness and accessibility of services.

Finally, a meaningful education must also provide a certain level of knowledge and skills to children that allows them to gain access to new livelihoods after completing their schooling, allowing them to earn a living and contribute to family and community development. In the community and parent interviews conducted during the field visit, most interviewees indicated that they believed children who graduated from the formal education system would not return to pastoralism, but would rather gain access to white collar jobs working in offices or development agencies (Field Visits and Interviews, 2017).

Most of the literature reviewed by this report found an equation between education and formal schooling. Only a few studies, drawing on anthropological approaches, considered schooling as one type of education among others. Some advanced the idea of 'resistance' to schooling and 'preference' for other existing types of education as a consequence of the (perceived) cultural gap between school and society. In Karamoja, initiatives to support community schools (fixed or mobile) have been more successful historically than formal schools, because pastoralists were involved in the design of the education programme (timetable, staff, content) and did not fear cultural alienation for their children as a result of attending school.

There is less need today for extensive mobile education for Karamojong communities, as many of them have settled into permanent or semi-permanent communities and no long travel in mass with their livestock herds. Rather, there is a present and extending need to ensure the education offered to communities in Karamoja allows them to benefit from schooling and to utilise their educational gains to reduce poverty and access better livelihood opportunities within today's society. This does not necessarily mean that the content of the education provided in today's formal system is fully aligned to the socioeconomic and sociocultural needs of the Karamojong, although it is clear that accessing a level of functional literacy and numeracy (as well as basic skilling) is paramount in ensuring that Karamojong children benefit in a meaningful way from the education they receive.

According to the district and school officials met during the field visits in March 2017, a daily meal for pupils attending formal schools has also provided an incentive for pastoral people to send their children to school and increases their willingness to contribute to costs. Past experiences have shown that, in cases where school feeding programmes have not been well-organised and the supply of food has been erratic, parents have withdrawn their children. The push-pull factor of

school feeding programmes in Karamoja, sponsored by the WFP, has clearly provided an incentive for some families to send their children to school regardless of the academic gains they make while they are there.

In sum, research shows that perhaps the most important feature for successful schooling of pastoralist populations is the school culture and the way it respects and values local society and its norms. In schools where pastoralism and agro-pastoralism are seen as a viable and respectable ways of life, formal and non-formal primary schooling interventions have been successful (albeit largely through non-formal delivery systems). In school environments where pastoralism is looked down on, the same delivery systems have largely failed (Krätli, 2001).

Research has identified best practices in the delivery of education services to pastoralist communities worldwide that can serve as a guiding principle for institutions working with pastoralists to plan more effective interventions and to ensure the education provided is relevant and meaningful. Based on a study on the Karamojong and Turkana communities commissioned by The World Initiative for Sustainable Pastoralism, it is possible to identify key elements of good practice in the provision of meaningful and appropriate education services to pastoralists based on current and historical accounts of quality programmes and interventions. These are summarised below and excerpted from Schelling *et al.* (2008).

1) Ensure the deep and meaningful participation of pastoralists at all stages of project design

Pastoralists should be engaged at the earliest stages of problem setting and throughout the project cycle. Participation ensures wider empowerment and the acceptance and uptake of project activities within communities. Participatory assessment must gather information on the main characteristics of the barriers to accessing education services, on community priorities and preferences and on analysis of primary stakeholders.

Community participation in planning education provision empowers community members to voice their needs, and later allows them to pursue their own initiatives to improve access to the services they desire. Participatory monitoring and evaluation of activities should constitute the basis for scaling up appropriate interventions and appropriate policy formulation in a pastoralist context.

2) Adopt an innovative and adaptive approach

Appropriate attention should be given to community-based services, such as community-based schools, early childhood development centres and ABEK centres, with close attention to the quality of the education being offered and to ensure the continuation of children in the education system beyond the duration of project support (sustainability). Provision of some form of non-formal services are a proven way to link pastoralists with formal education services.

Projects also need the capability and space for flexibility, for example with regard to school calendars and timetables for pastoralist children. Teachers also need training to adapt national curricula to the pastoral setting where possible. Flexibility should also be exercised in identifying both formal and alternative education solutions, and inter-sectoral collaboration should be pursued where relevant.

3) Ensure cultural and gender sensitivity

Considering the unique way that pastoralist communities understand the world around them, interventions to improve access to education among pastoralist communities should include

sensitisation to help them appreciate other worldviews regarding education. Traditional elders should be specifically targeted, since they are the key custodians of culture and are also the community gatekeepers allowing children to access and attend school.

Teachers and school leaders should also ideally be recruited from within the community. Where this recruitment cannot supply the required numbers, however, the quality of service provision can be improved if all personnel are trained to be culturally sensitive to the needs of pastoralist children. Girls' needs have to be addressed in particular in project development, since they face specific challenges in access to services.

4 Current interventions to improve access to, and the quality and relevance of, education outcomes in Karamoja

4.1 Overview of MOES policies and performance regarding access and quality

According to statistics gathered annually by the MOES, the quality of primary education in Uganda is largely measured by the following parameters:

- the availability and adequacy of qualified primary teachers;
- the number of teachers on the payroll;
- the availability and adequacy of classrooms;
- the availability and adequacy of toilet facilities;
- access to safe water sources nearby schools;
- performance in the Primary Leaving Examination (PLE);
- proficiency in literacy and numeracy;
- the availability and adequacy of instructional materials;
- effective support supervision; and
- the adequacy of instructional time.

Sector performance in the provision of quality primary education, and the challenges identified in its delivery, are highlighted in the Ministry's Education Sector Annual Review Report produced each year. While Uganda's education sector has performed well nationally in increasing access to primary education and attaining the MDG targets for enrolment, it is persistently grappling with challenges around providing quality education, particularly in view of the high investments already injected in the system that have still yielded poor returns in terms of numeracy and literacy outcomes among students.

Nationally, the education sector is currently in the transitional phase of formulating the next Education Sector Strategic Plan (ESSP). According to the MOES, the policy and strategic direction for quality primary education under the new strategy is:

- improving literacy (reading and writing);
- improving numeracy (arithmetic and practical mathematics); and
- strengthening and motivating the teaching force.

At the primary level, the MOES has recommended that interventions to address quality should focus on critical areas that include:

- teachers' development, management and motivation;
- strengthening school inspection by centralising the inspection function and making it independent;
- reconstituting the staffing establishment for the inspectorate departments at district and national levels depending on the number of schools;
- fully implementing the scheme of service at primary school level with a view to improving inspection at school level;
- providing teachers' accommodation starting with hard-to-reach and hard-to-stay areas to reduce absenteeism and increase motivation and retention;

- institutionalising school feeding programmes;
- improving school management; and
- strengthening community participation (MOES, 2015).

It is also worth pointing out that, with support from DFID, the MOES is currently reviewing its assessment system with the goal of better aligning the system with Uganda's educational needs, culture, history and context. The goal of the revision is to help Uganda produce the learning outcomes it desires in students now and in the future under constantly evolving economic, social, political and external influences (Allen et al., 2016). At present, the assessment system focuses on high stakes examinations at the end of Primary 7, Senior 4 and Senior 6, which largely focus on content familiarity and the regurgitation of non-applied information to knowledge-based questions. Questions that require students to apply their existing knowledge to new situations or processes they have not practised are not currently considered important (Allen et al., 2016); yet this very application of knowledge to new concepts and situations is what is most needed in learners, who must possess the skills and abilities that allow them to gain employment in today's world and to contribute to developing the country and its economy. The curriculum in the primary and secondary formal education system does not directly develop these skills. This reality further complicates the provision of a meaningful education through the formal school system, especially for children in Karamoja whose families see education as a possible route out of poverty through gaining the qualifications needed to secure employment.

The broader national outlook regarding required inputs to improve the quality of education service provision mirrors many of the quality education improvements required in Karamoja, although the scenario in Karamoja is worse in both absolute and relative terms than the education challenges faced by other sub-regions in the country. According to education officials and head teachers interviewed during the field visits and workshop in March and April 2017, however, and confirmed via education data collected during the evaluation, Karamoja suffers from higher rates of teacher attrition and inadequate staffing at both district offices and schools, higher rates of pupil absenteeism (especially when food aid is not provided), a lack of instructional resources and materials (and the earlier-than-expected wearing out of textbooks supplied under the SHRP and the Uganda Teacher and School Effectiveness Project [UTSEP] financed by the Global Partnership for Education [GPE]), a higher staff turnover, and a persistently lower than required number of indigenous Karamojong teachers in both schools and regional Primary Teacher Training Colleges that are capable of teaching in the local language.

Due to the region's low socioeconomic status, its history of conflict and its current fragility and widespread underdevelopment, it is high on the sector development agenda and has attracted substantial support from government, donors, bilateral agencies and development partners for both reconstruction and rehabilitation. Prominent in the region's education strategy are interventions geared towards providing better access to, and completion of, quality education. This includes aligning the region's education development agenda with national policy, with a special focus on improving literacy and numeracy outcomes and teacher performance and motivation. At present, previous interventions to improve literacy in the region and teacher capacities have been limited in scope and fragmented across small geographical areas, subject to short project timelines and little ongoing continuous professional development of teachers to improve key knowledge, skills and classroom practices.

Over the years, investment in the education sector has been largely driven by sector development policies like the KIDDP, PRDP, QEI, UPE and now outdated ESSP; yet, rarely have their designs been specially modelled to align to the region's unique situation. The persistent education challenges in Karamoja can partially be attributed to the failure of development programmes to appreciate the region's unique complexity and recognise that it will likely not benefit from blanket

programmes that may work elsewhere in the country. As a result, some Karamoja programmes have not yielded their intended development outcomes. At a macro-level, national education policies have been less effective in engaging with pastoralist societies, even further marginalising them and limiting achievement of county targets. Mainstream programmes like UPE, for example, did not take into account the pastoralist nature of the Karamojong and their migratory existence, partly explaining why so few Karamojong children are in school compared to the national average. In general, the cumulative improvements in education performance throughout Uganda, except for Karamoja, have generated interest in searching for a more unique Karamoja-specific education delivery model to improve education access and quality in the sub-region.

Results from a joint MOES-UNICEF study in 2009 found that, in order for vulnerable children in the most disadvantaged communities, like Karamoja, to realise their right to education and increasingly participate in early childhood development and primary school initiatives, regional plans and budgets must "prioritise early childhood development; timely enrolment and retention; completion of primary school—especially for girls; enhance community mobilisation and behaviour change of caregivers to support education; and address bottlenecks to affordable education focusing especially on reducing disparities" (UMG, 2009). The current status of education service delivery in the sub-region is characterised by low levels of primary school enrolment, survival, completion and transition—especially for girls; high rates of teacher attrition, inadequate teacher deployment and low numbers of native Karamojong teachers; shortages of teachers who speak the local language (limiting early grade reading programming and instruction in the local language); difficulties transiting from informal and integrated learning under ABEK to the subject-oriented primary school curriculum, which can encourage low performance and early dropout from school (UMG, 2009).

The sections below describe interventions currently in place to improve access to and quality of education in Karamoja over the next 3–5 years based upon some of the challenges identified above. The highlights are limited to the structure and purpose of the specific interventions and opinions about their linkage with quality education investments; they are not concerned with their evaluation.

4.2 Current interventions spearheaded by the GOU

In addition to the work of the development partners, donors and bilateral agencies previously mentioned, the GOU (through the MOES and with funding from other agencies) is directly responsible for implementing a handful of education access and quality programmes in Karamoja. These are described below.

4.2.1 UTSEP under the GPE

The UTSEP project is funded through pooled funding, with the World Bank office in Uganda operating as the fund manager. It supports government schools and efforts to enhance the quality of primary education throughout the country, including in Karamoja. UTSEP has scaled up the SHRP early grade reading model to Kotido District in Karamoja, including provision of instructional materials, teacher training and support. GPE funding also supports training and professional development for teacher tutors and structural development of coordinating centres where tutors are based, including the provision of computers, projectors, solar lighting, digital cameras, motorcycles and the mapping of schools in their areas of coverage. The programme also supports the establishment and operationalisation of an ICT-based inspection system and improved, digitised data collected and management, as well as expanding periodic assessments of early grade reading.

Although the programme was scheduled to run from 2014–2018 for a total of \$100.5 million, only one quarter of those funds have been disbursed at present and implementation of the programme has been severely delayed. To date, only a few project milestones have been achieved, most notably around teacher training, school management committee training and the execution of both an EGRA and the National Achievement of Progress in Education for students in Grades 3 and 6. According to a World Bank progress report from November 2016, implementation continues to lag on key activities due to delayed project effectiveness and slow implementation progress (World Bank, 2016). The task team, in collaboration with development partners, continues to provide the necessary technical support to various implementing departments so that the project can attempt to catch up with planned activities and realise its objectives.

4.2.2 Karamoja Integrated Disarmament Development Programme (KIDDP)

The KIDDP is a region-wide programme coordinated by the Office of the Prime Minister and responsible for developing the education sector within Karamoja's seven districts. Programme support focused on construction of schools, dormitories, latrines, staff houses, mobilisation of communities and bursaries for pupils. The current KIDDP development framework is specifically tailored to address the unique context and development challenges in the Karamoja region. The KIDDP harmonises various development interventions by the GOU, bilateral and multilateral development partners and CSOs.

4.3 Current interventions by multilateral and bilateral agencies

DFID (UK), USAID, World Bank, Irish Aid, SIDA (Sweden), the European Union, Germany, Japan, the Korea International Cooperation Agency (KOICA) (Korea) and Italy provide a significant majority of the external fund flows to Karamoja (KDPG, 2016). These funds are then channelled through local and central government, UN agencies and CSOs. Other external fund flows to Karamoja include those from foundations such as the MasterCard Foundation, funding from UN agencies and donors funding CSOs. It is important to note that DFID is currently the largest annual donor in Karamoja, followed by USAID and then the World Bank (KDPG, 2016).

The descriptions below focus on the most notable and wide-ranging development efforts by donors and bilateral agencies to support education programming in the sub-region, outside of those mentioned in the previous section that are tied to funding of specific programming and initiatives led by an individual development partner. Information on the interventions described in this section was gathered through interviews with national offices and programme staff in Karamoja from each agency in February and March 2017, in addition to background research on current interventions.

4.3.1 Irish Aid

Under the recently concluded Karamoja Primary Education Programme (2013–2016), Irish Aid supported the construction and rehabilitation of 21 primary schools throughout the sub-region with €12.7 million in funding. The programme aimed to increase access and retention of pupils in primary schools through infrastructure improvements in three schools in each of Karamoja's seven districts, benefitting a total of 17,000 pupils. Infrastructure that was developed included teacher's housing, dormitories, classrooms and sanitation facilities. Support also included the provision of furniture and instructional materials. Environmental conservation measures such as rainwater harvesting and tree planting were also supported by the programme. It is expected that the total new enrolment in the 21 schools will increase by about 30%, or about 22,470 pupils, in the next four years. In June 2017, the programme won the Global Partnership Award for the best Public-Private Partnership project in the world in 2016.

In March 2017, the Irish Government provided €7.2 million in funding to UNICEF to improve education for 150,000 vulnerable children and adolescent girls in across all of Karamoja's seven districts (76,606 boys and 57,834 girls from 283 primary schools and 6,716 boys and 4,891 girls in 23 secondary schools), with a special focus on children at risk of dropping out of school and children with disabilities and special learning needs. The five-year programme aims to reduce gender gaps in enrolment and completion; improve learning outcomes in basic education; increase the transition of students from primary school to secondary school; and increase awareness within families and communities on the importance of investing in education for both girls and boys. UNICEF has contracted partner CSOs to implement the programme, as well as provided direct support to districts.

Under Irish Aid's Uganda Country Strategy for 2016-2020, the focus of the education component is on improving the quality of primary education in Karamoja across the seven districts in alignment with MOES sector policies and the national strategic direction for education programming, which centres on quality education improvements through local governments, schools and communities. Irish Aid will also continue supporting girls' education through its bursary scheme to improve enrolment, retention and completion rates for girls in secondary school. They are also supporting implementation of the joint Ministry of Gender, Labour and Social Development-UNICEF strategy on ending child marriage and early pregnancy (2016-2019) in Karamoja, as well as menstrual hygiene management programmes in schools, including through production of locally-made sanitary pads. Irish Aid will also support MOES staff at central and district level on gender mapping and gender/equity-driven planning and budgeting, and collaborate with UNICEF to implement the national Special Needs Education Policy, the Non-Formal Education Policy and interventions to mitigate gender-based violence in homes and communities.

Irish Aid implements these education initiatives through partnerships with CSOs, UNICEF and the government, the latter of which are focused on post-conflict rehabilitation and reconstruction in the region. According to their strategy, Irish Aid will specifically partner with Research Triangle Institute (RTI) on provision of early grade reading and numeracy interventions in Moroto, Nakapiripirit, Napak and Kaabong Districts, teacher support through the MOES' Teacher Instructor, Education and Training Department across all seven districts, school improvement and girls' education programming with UNICEF in all seven districts, and community empowerment with various CSOs, whose services are procured on an as needed basis across all seven districts.

4.3.2 The WFP school feeding initiative

The school feeding programme is funded by the WFP and has been implemented by the MOES and development partners for over 30 years. The programme has been executed in Karamoja as a response to the economic and food security challenges the region faces that hinder children's' continued and sustained participation in school at both primary and secondary level in all government-aided schools, in addition to selected primary and secondary community schools in the seven districts. The programme also provides food to Karamojang households throughout the entire region. At present, WFP meals reach all schools in Karamoja—the only region where the programme is implemented. "For decades, WFP meals in Karamoja have helped to address short term hunger while making learning easier for the children, reducing drop-out rates, encouraging enrolment and enabling the government to achieve overall education objectives in Karamoja" (WFP, 2015).

Various efforts to supplement the programme have met with mixed success. To date, the homegrown school feeding programme, whereby schools grow their own food in school gardens, has not been widely implemented in the region; at present, only a few schools in each district supplement WFP meals with additional, locally-grown food. Since 2015, however, Uganda has been implementing the "Karamoja feeds Karamoja" programme in partnership with WFP, who helps the GOU to programme, handle, process, store and deliver food grown by the government's prison's farm in Nakapiripirit District to local schools (WFP, 2015). Over 300 metric tons of maize meal was initially supplied to 24,000 children in 63 schools in the first year; over time it is expected that the programme will expand to other districts in the region (WFP, 2015).

Many stakeholders at both national and regional levels view the school feeding programme as one of the most important interventions that keeps children in school. Over the last few years the programme's support has declined due to limited funding provided to the WFP, reducing from providing three full meals a day in both boarding and day schools to providing two meals a day in both boarding and both provides not provide an exit strategy.

National Guidelines on school feeding, including the home-grown school feeding programme, were adopted by the ministry, but have not been implemented nationwide, especially in Karamoja. Although conceptual briefs have been developed by the ministry to address the situation in Karamoja regarding school feeding, no concrete and feasible alternative options have been identified beyond WFP support. The food security situation in Karamoja is chronic and can only be addressed via a multi-sectoral and multidisciplinary framework. Key development partners must engage the Office of the Prime Minister to explore and implement more feasible options for ensuring food availability in the region in a permanent and sustainable manner (Irish Aid, 2015).

4.3.3 UNICEF

UNICEF has been working for years to improve the quality of primary education in Uganda, especially in the Karamoja region. Support has centred on nurturing of a child-friendly school environment through the development and implementation of the Basic Requirements and Minimum Standards policy and helping low performing districts improve education access and quality through the MOES' Quality Enhancement Initiative. All seven districts in Karamoja and its 283 schools benefit from UNICEF support to improve enrolment, retention and completion among students, in addition to improving school environments for children's safety, security and learning. Whole school model approaches like UNICEF's focus on improving the quality of teaching and learning, the health and safety of the school environment, school leadership and governance and community and parent engagement. Through this multi-pronged approach, interventions work towards holistically improving each child's cognitive, physical, social and emotional development.

UNICEF's experience in the region, extensive programming and influence on the provision of quality primary education offer a prospect for further exploration and harnessing. Most of UNICEF's recent programming has been directed towards supporting and engaging with districts, schools and communities to develop and implement education improvement projects. Currently, UNICEF directly assists districts to develop education improvement plans which are verified by UNICEF and submitted to the MOES for approval, on which UNICEF disburses funds on quarterly basis for implementing activities and ensures accountability through submission of quarterly progress reports. UNICEF also partners with local CSOs, including Voluntary Service Overseas (VSO) and Straight Talk to implement the bursaries scheme, with UNICEF playing a technical assistant, monitoring and evaluation and fund disbursement role and the CSOs directly implementing the programme.

From 2016-2020, UNICEF is also directly implementing a programme promoting access to quality and equitable education for Karamojong children in partnership with the MOES to ensure that by 2020, there is an effective and well-resourced formal quality education system in Karamoja that is

inclusive, relevant and accessible to all boys and girls and increases school retention, completion and achievement rates.

4.3.4 USAID

USAID works with the MOES to improve the literacy skills of 3.5 million children across the country (including in Karamoja) through its early grade reading agenda. USAID's programme aims to increase literacy, ensure a safe and supportive school environment and increase health-seeking behaviours through measurable improvements in student knowledge and life skills. USAID activities strengthen the teaching workforce by improving teacher training, retention and supervision, and access to appropriate administration tools.

Programmes support evidence-based curriculum reform and policy development to improve the quality of the education system. USAID also engages local communities and empowers them to participate in the education of their children. By investing in literacy, HIV/AIDS prevention and providing a safe and supportive school environment, USAID works through its implementing partners to increase students' success and retention in school and to promote healthy behaviours that lay the foundation for lifelong success and learning.

4.3.5 Karamoja Integrated Development Programme (KIDP)

This regional programme is coordinated by the Office of the Prime Minister and includes a component for development of the education sector across Karamoja's seven districts. Programme support includes construction of schools, dormitories, latrines, staff houses, mobilisation of communities to send their children to school and support school development and bursaries for pupils.

4.4 Current interventions by CSOs

According to a Karamoja NGO Mapping Report from November 2016 by the Karamoja Resilience Support Unit and the Karamoja Development Partner's Group (KDPG), 20 organisations support education programming in Karamoja through various projects funded by the European Union, Danish Church Aid, the German Federal Ministry for Economic Cooperation and Development, SIDA, the European Commission, VITOL Foundation, the Norwegian Agency for Development Cooperation, Irish Aid, World Vision Korea, Diakonia, the Liberty Foundation, Diorapthe, the Dutch Ministry of Foreign Affairs, the WFP and USAID. The list below summarises the development partners implementing education programming in Karamoja.

Adventist Development and Relief Agency (ADRA)	Andre Food Consult
BRAC Uganda	Caritas Kotido Diocese
Concern Worldwide	Ecological Christian Organisation
Institute for International Cooperation and Development (C&D)	International Institute of Rural Reconstruction
International Rescue Committee	MAP International
Millennium Promise Alliance Inc.	Moroto Nakapiripirit Religious Leaders Initiative For Peace (MONARLIP)
Research Triangle Institute	Restless Development Uganda
Samaritan's Purse	Save the Children
Straight Talk Foundation	VSO
World Vision Uganda	ZOA

Table 1: List of education partners implementing projects in Karamoja

The descriptions below focus on the most notable and wide-ranging of these programmes in an effort to describe the most prevalent and largest education programming currently operating in the sub-region. Information on each programme was gathered through interviews with national and programme staff in Karamoja from each organisation in February and March 2017, in addition to background research on highlighted programming in between field visits. A more detailed description of each programme is included in Annex A.

4.4.1 World Vision Uganda: Addressing Barriers to Enrolment and Retention in Karamoja (ABER-K)

Over the course of a three-year period from 2017-2019, World Vision's ABER-K project aims to reach 40,000 out of school children in Karamoja's Abim, Kotido and Kaabong Districts in 89 government-aided primary schools. Targeting children between 6-14 years, the project will work towards improving school learning environments and addressing negative social and cultural barriers to enrolment and retention in school in Karamoja. The project will reach out to pupils who missed school, those that never enrolled, those who enrolled and dropped out, and those who enrolled but do not attend. The project will construct 84 classroom blocks, 42 latrines, 21 water tanks, 50 dressing room blocks for girls, three boarding sections for girls and 10 boreholes. The project strategy prioritises community engagement; strengthening community structures and mechanisms that support education; bolstering education systems to enhance enrolment and retention; creating safe and child-friendly school environments; and developing school infrastructure.

The \$5.37 million intervention is aligned with the GOU's priorities and the policies of the MOES. The project is jointly funded by Educate A Child (Qatar Foundation), KOICA and World Vision Korea. The project model is based on the assumption that if target communities in Karamoja recognise the importance of education for their children and are supported through community structures and systems strengthening, a network of engaged community members will champion enrolment and retention campaigns. Furthermore, the project is designed to build on previous and ongoing interventions in Karamoja's education sector supported by World Vision as well as development partners like the Adventist Development and Relief Agency (ADRA), Save the Children, UNICEF and the World Food Programme (World Vision Uganda, 2017).

4.4.2 Restless Development Uganda—Sustainable Livelihoods for Karamojong Youth

Restless Development is currently implementing a three-year initiative that aims to address food insecurity, youth poverty and unemployment in Karamoja. The programme applies Restless Development's youth-led peer education model, identifying and training 56 Karamojong youth to lead all programme activities to improve the programme's credibility among local communities, as well as ensure its impact and local ownership. The €658,129 programme is funded by the European Commission and a corporate foundation. The programme utilises a mixture of approaches to achieve its targets, including promoting youth agribusiness, vocational training and apprenticeships, improving livelihood service delivery and supporting youth advocates.

Youth Agribusinesses: Restless Development supports youth groups to go beyond subsistence farming and establish small agribusinesses which meet the emerging demands of the agriculture market and ensure they make a profit to sustain themselves and their families. Youth groups receive training on entrepreneurship skills, business management skills and life skills.

Vocational Training and Apprenticeships: The project equips young people with the skills they need to fulfil roles in emerging sectors in Karamoja through vocational training and pairing youth with local artisans and employers so that they can gain practical work experience.

Improving Livelihoods Services for Youth: Restless Development identified 40 key players working with youth in Karamoja and supports them to engage young people more effectively to access the services they require to establish a sustainable livelihood.

Raising Youth Voices: The programme supports young advocates to articulate and represent the collective voice of community youth to local leaders and decision-makers. Advocates share youth concerns relating to livelihoods and employment issues and advocate for the improvement of government policies to better cater for young people.

4.4.3 VSO and the Belgian Development Agency (BTC): Karamoja Region Skills Development Project

The VSO-BTC project provides support to the Skilling Uganda policy in the Karamoja Sub-Region by supporting relevant skills development for 2,000 Karamojong youth, women and girls with €398,111 in funding from Irish Aid. It was conceived as a geographical extension of the Belgianfunded Support to Skilling Uganda intervention and focuses on supporting the Business, Technical and Vocational Education and Training (BTVET) reform agenda, strengthening regional and local skills development stakeholders, and piloting new competitive and demand-driven Skills Development Fund mechanisms. As the Karamoja region has specific needs due to its high poverty rates, low economic development, low literacy levels, limited number of training providers and below average quality of training, the implementation of Skilling Uganda requires a specific approach to ensure its relevance to the Karamoja context. Therefore, the intervention focuses largely on complementarity skills development alongside livelihood activities, short-term vocational training, emerging markets and identifying future economic developments.

4.4.4 Save the Children supported initiatives

Save the Children supports various programmes in basic education in the Karamoja Sub-Region, described below.

ABEK

Although funding to Save's ABEK programme has waned in recent years, support is still provided to 52 centres in Kotido, Napak, Nakapiripirit and Moroto Districts. Support covers construction of the centre, provision of instructional materials and a midday meal, a stipend for non-formal teachers in uncoded centres, capacity-building for non-formal teachers and sponsoring open days for education advocacy with district education officials, teachers, children and local leaders.

School Me Programme (follow-up to the Strengthening Access to Girls Education [SAGE] Programme)

From 2013-2016, Save the Children's SAGE programme operated in six districts in Karamoja, including Moroto, Amudat, Napak, Kotido, Kaabong and Nakapiripirit to support to basic education for 1,800 girls from 4-15 years of age through ABEK, Early Childhood Development (ECD) Centres and selected government-aided formal primary schools. The SAGE project addressed the underlying cultural barriers that prevent girls from enrolling in school, staying in school and completing school, while also improving the safety of school environments for girls to ensure the quality and meaningfulness of the education they receive in school. The School Me Programme is a follow-up to the SAGE programme, seeking to ensure the girls supported under SAGE remain in school and complete their education by successfully transitioning from lower primary to upper primary and onward to secondary or vocational school. School Me is implemented in Napak, Kotido and Moroto Districts with funding from Save Korea.

Early Childhood Development Education (ECDE)

Save the Children supports local governments and communities in four districts in Karamoja (Kotido, Napak, Nakapiripirit and Moroto) to implement ECDE programming in 24 centres for children aged 0–8.

Save the Children supports local governments and communities in four districts in Karamoja (Kotido, Napak, Nakapiripirit and Moroto) to implement ECDE programming in 24 centres for children aged 0-8. Save conducts training for ECDE caregivers to help them stimulate the physical, cognitive and psychological maturation and development of children. The Karamoja intervention is modelled on concepts of traditional child rearing practices with an integrated package of services and in-built framework of child protection and participation.

4.4.5 Research Triangle Institute: SHRP

SHRP is an eight-year USAID-funded initiative (2012-2019) that supports early grade reading in local languages for Primary 1-4 pupils in government-aided primary schools across the country. It is implemented through established sector structures at central, district, community and school levels. It also provides auxiliary staff at district level to augment school-based monitoring and evaluation through a team of field assistants. The programme's components include provision of instructional materials (primary textbooks and teacher's guides in local languages), training of teachers and head teachers, monitoring and support supervision and periodic assessment of early grade reading competencies among pupils. The programme design offers an inclusive and well integrated package for delivery of teaching and learning processes to help pupils attain better reading outcomes.

SHRP beneficiary districts in Karamoja include Moroto, Nakapiripirit, Napak and Kaabong. Materials have been developed in Ngakarimojong, one of the 12 major languages selected by the MOES for prioritisation at the start of the programme in 2012. Both Abim and Amudat fall out of the beneficiary bracket because their communities predominantly speak other languages – namely Lebthur and Pokot, respectively. These two districts, their education systems and their communities lag behind others in the region as currently there are no similar interventions to serve them, although a uniform and balanced approach towards teaching in the local languages would be ideal to address the large challenges regarding poor reading outcomes among pupils throughout Karamoja.

Findings from the SHRP Early Grade Reading Assessment, conducted in Karamoja in October 2016 in three districts (Moroto, Napak and Nakapiripirit), demonstrated positive achievement among Primary 1 pupils in reading. Learners in programme schools could read, on average, 6.3 letter sounds correctly, compared to learners in non-programme schools who read, on average, 1.9 correct letter sounds (SHRP Annual Report, 2016).

4.4.6 BRAC Uganda: ECD Play Lab Project and student scholarships

In 2015, the LEGO Foundation committed to promote the importance of learning through play in the developing world through the BRAC Play Lab Project in Bangladesh, Uganda and Tanzania. The BRAC Play Lab Project is a partnership between the LEGO Foundation, BRAC International in Uganda and Tanzania, BRAC USA and the Centre for Play at BRAC University's Institute of Educational Development in Bangladesh.

The three-year, \$4.7 million commitment includes developing and piloting the Play Lab, a model for integrating learning through play into the lives of young children. The pilot includes the development of 240 new Play Labs for 7,200 children aged 3-5, training for 480 adolescent girls as paraprofessional play-leaders and sessions for 7,200 parents on the importance of play. In Karamoja, the project is supporting a total of 35 play labs throughout the three districts of Napak, Nakapiripirit and Moroto. The project includes the design of safe and sustainable play spaces and low-cost materials for children aged 0-10. A play consortium of national and global play-based experts has developed the model based on best practices on learning through play using low-cost and high impact interventions. The planning and design process also includes the participation of community members to ensure that play environments are created in homes and community hubs that lack play spaces.

In partnership with the MasterCard Foundation, BRAC is also implementing a national level secondary scholarship programme targeting academically talented yet economically marginalised young Ugandans; 60% of them are girls. Over a period of eight years, the programme will enable 5,000 students to complete secondary school and transition into higher education. The programme will also help them acquire leadership qualities, work skills, social and emotional competencies and experience in community service. BRAC has earmarked 300 scholarships specifically for students from Karamoja.

4.4.7 Straight Talk Foundation

Straight Talk Foundation implements activities through print, radio and direct communication. Its programmes and interventions target young people as the primary audience; parents and teachers are the secondary audience. Straight Talk is highly effective in behaviour change communication models and combines mass media with face-to-face community outreach and mobilisation programmes. Straight Talk is currently implementing the Irish Aid-funded Bursary Program in Karamoja, which seeks to benefit bright but disadvantaged children to achieve a secondary education once they successfully graduate from primary school. The programme supports 200 boys and girls each year to transition to secondary school, as well as an additional 25 to attend third level education.

4.4.8 UWEZO

UWEZO conducts annual assessments of learning outcomes for primary children within communities and households in partnership with non-professional volunteers and parents. The assessments are conducted during weekends to minimise absenteeism, and results are shared with parents immediately upon completion. UWEZO's approach to community-based assessments has, in many ways, changed the dynamics around testing and the use of results to inform parent, community, school and national responses to Uganda's learning crisis, as they are packaged in an easy to understand way and are delivered immediately to participants following the survey in their household or school.

The 2016 UWEZO assessment found that pupils in Karamoja scored in the middle of the regional clusters in English reading scores (ranking 6th out of the 11 district clusters), below districts in central and western Uganda but above districts in West Nile, northern and eastern Uganda (UWEZO, 2016). They scored lowest in numeracy assessments within all 11 district clusters (UWEZO, 2016). Generally across all categories of student performance and teacher and school quality the northern region, including Karamoja, scored the lowest.

Each year, based on findings from the UWEZO study, a series of recommendations are presented at national level to education stakeholders and policymakers. Most notable among their conclusions are that learning outcomes go hand-in-hand with a conducive learning environment. Recent research indicates that students in smaller classes are likely to learn more than their counterparts in larger classes since their teachers can easily adapt their teaching to individual students' needs and levels of understanding (UWEZO, 2016). This individual attention is also likely to increase children's enjoyment of learning and their retention in school. UWEZO has also found that more adequate provision of school resources, including classrooms and other incentives, could encourage teachers to accept appointments in regions and schools that have been disadvantaged (like Karamoja), and may in the long run reduce regional inequalities in learning outcomes.

4.5 The relationship between government and civil society in Karamoja

Due to weak state capacities and lack of resources within the government, many municipalities subcontract to local companies and CSOs to provide education services to improve access and quality. It is estimated, for example, that about 80% of all schools in northern Uganda were built by CSOs during and shortly after the conflict (Datzberger, 2016). For now, the majority of these schools are administered by the government, despite serious funding and capacity constraints. The partial to full privatisation of schools over the last decades has led to new forms of governance between state and non-state-actors in education. In this context, all the district education officials interviewed during the field visits in March and April 2017 indicated the lack of information-sharing, planning and complementary work done between local CSOs and the government, causing the latter to lack information about their programming, outreach and results, as well as about work with the CSO community to steer resources towards communities and regions most in need of support. Although CSOs are required to report to the district education office so that they can integrate their support and initiatives into annual district work plans and budgets, many do not come forward and report. The lack of alignment and proper coordination frequently causes duplication of work and uneven support among districts, negatively impacting access to and guality of education in specific districts.

At the April workshop with district education officials in Karamoja, district level coordination of implementing partners was raised as a problem for effective service delivery throughout the region.

Participants indicated that establishing Memorandums of Understanding, regular sectoral working groups, joint project meetings and regular review meetings would be beneficial in closing these gaps and improving coordination and communication between government and civil society. Moreover, regional coordination efforts need to be revived by strengthening sectoral working groups, better leveraging the work of the Karamoja Donors' Group and Karamoja Policy Committee, and establishing a regional coordination committee comprised of district leaders to share information regularly and plan. At a national level, the region must engage with multi-sectoral working groups in the ministry as well as jointly plan and execute monitoring and supervision with national level stakeholders, government officials and implementing partners. In sum, more effective coordination and communication, starting from community to school level and from school level to district level throughout the region, will greatly improve service delivery and programme results across Karamoja. Local governments, as well as civil society, require support to make these recommendations a reality and ensure proper channels and initiatives are taken on that will streamline interventions in the sector and ensure all areas of the region are able to access programming to improve education access and quality.

4.6 Challenges in the collection and usage of official education data

Another important consideration in the bid to improve coordination and communication across government, donors and civil society involves the collection, storage and use of appropriate education data. At present, education data collection across Karamoja is exceptionally poor and limited from both districts and CSOs, the latter of which often largely only collect data for programme purposes and do not share it with education officials nor contribute to annual data reporting at a regional or national level. Data is rarely used by districts to inform decision-making, advocate for better and more streamlined service delivery or to hold people, organisations and institutions accountable. Data gaps in information gathering among schools and government offices were apparent during the field visits to Karamoja in March and April 2017. Few district offices had access to reliable, up-to-date records about their schools, teachers and students, and none had it digitally available. Rather, data collection efforts are largely done by hand and captured on paper forms that are often misplaced and rarely completed. While certain district officials did have good knowledge of their schools and gaps in service delivery, the information they shared was not recorded in official written records nor easily available for analysis. In the sections below, data is missing from Napak and Kaabong Districts, despite repeated attempts to capture it from the education offices. Additional details on this are included in the sections below.

To date, official education data (MOES' annual school census) is collected on hard copy forms at school level, submitted to districts for collating, and then submitted to the MOES for analysis. The process takes months, and when results finally are released from the ministry, they are often amalgamated at regional levels and not directly shared back to districts and sub-regions for reflection and analysis to improve planning and implementation. This severely limits the ability of districts and the sub-region as a whole to more effectively plan and deliver critical services to populations. In this report, despite repeated efforts to collect accurate and up-to-date information about each district and its schools, students and teachers, data gaps remain. We have done our best to represent the data captured accurately in the sections that follow, and indicate places where gaps still exist and must be followed up with more extensive data collection efforts in coordination with schools and the government. Where there are limitations in the analysis due to these data gaps, they have been clearly highlighted and explained.

5 Current context: what is a *meaningful education* in Karamoja?

This section explores what a *meaningful education* is in Karamoja by tackling the questions:

- what services should a meaningful education in Karamoja provide?
- what is the role of education in Karamojong society?
- what demands are placed on the education system in Karamoja?

'Education', widely understood to be 'schooling' in mainstream development literature and policy, is considered globally to be positively instrumental for people in developing countries. Research has shown that higher levels of education transfer into better development outcomes—reduced poverty, improved health-seeking behaviours, gender equality and social mobility. Yet research also shows that education for people who are marginalised socially, politically and economically may not return the same benefits (Greany, 2016). Little evidence exists for how marginalised people themselves view education and its relative benefit to their lives, culture and livelihoods (Datzberger, 2016).

How people define the value of education and apply that value to their daily lives is critical to improving access to, and uptake of, a meaningful, quality education in a remote and marginalised region like Karamoja. Understanding how the Karamojong apply meaning-making to education allows us to understand local education priorities better now and over the next five to ten years, as well as household and community decision-making around education, which is critical to ensuring relevant and quality education services are delivered. During the course of the fieldwork, the following components of what makes a meaningful education were identified by district education officials, teachers, school leaders, community members and parents.

Context matters: In Karamoja, the social, cultural and collective values of the Karamojong people are central to understanding what a meaningful education looks like for people living in the region. Education is not delivered in isolation and must consider the role that livelihood, culture, food security and scarcity, access to resources, climate change and climate-related shocks, and decades of aid dependency has had on the region and its people. Moreover, education must be aligned to the traditional values and lifestyle of the Karamojong as pastoralists and cattle keepers struggling to respond to decreasing cattle populations and recently-ended conflict and disarmament, as well as the needs of a growing population opening up to the rest of Uganda and the world. As communities continue to settle over the next five to ten years, context will continue to matter as they adapt to a changing environment and economic circumstances.

Hierarchy of needs in relation to education: Increasingly over the last century, and most notably in the last 50 years, education has been identified as a fundamental human right and essential for the exercise of all other human rights, as it is seen to promote individual freedom and empowerment and yield important development benefits. For decades in Karamoja, however, there was limited support—and often hostility—towards formal education, foreign curricula and foreign teachers (e.g. non-Karamojong teachers) who did not value the needs of the Karamojong people, their lifestyle and culture. However, in the mid-1990s, attitudes towards education began changing as the principles of the Karamojong people were incorporated into the education services and curricula delivered in the region (largely though the ABEK programme). Since that time, education began to be seen as a basic human right—and need—in the region as people began to view education as a potential tool by which economically and socially marginalised communities can lift themselves out of poverty and participate fully as citizens. Today, many communities in Karamoja

see education as a pathway to household and community development and a means of accessing benefits from the government and civil society.

Education as an escape from poverty: As Karamoja has stabilised over the last years, people across the region have begun to see the value of education as a means to gain the knowledge and skills necessary to support their livelihoods and survival, most notably through literacy, numeracy and skills-based education. Today, 74% of adults still have no formal schooling (Wamani et al., 2016), but education is increasingly seen as a possible escape route from poverty that can lead to economic returns and improved household income through access to other forms of employment (aside from pastoralism) after school. In one youth group visited in Napak District during the study, a group interview was conducted with 30 members of the community. When asked how many of them had attended any type of school, only two young men raised their hands; they had each completed school through Primary 3. Of the 30 members present, however, all of them-young men and women alike-were sending their children to the local government primary school. They said that only though education could their children gain skills to improve their lives, learn to read and write, and ensure the next generation of Karamojong were not left behind in the country's development and growth (Restless Development Youth Group Interview in Napak, March 6, 2017). It is evident that this opinion regarding education is present today and will continue to exist over the next five to ten years. In a sense, the concept of 'education as development' is taking root in Karamoja as households and communities begin to value the impact formal education can potentially have on their lives and livelihoods.

The role of communities and elders: The engagement of communities and elders in both approving and monitoring the delivery of education services to children and youths is paramount in defining what is labelled a meaningful and quality education in Karamoja. Elders and respected members of *manyatas* in Karamoja hold a significant place in both households and communities, and nothing is implemented with success in the region without their knowledge and approval. Getting their buy-in for the education programming delivered throughout the region is therefore central to ensuring uptake of education services.

The importance of safety and protection at school: Perhaps even more so than many other regions in Uganda, the concept of school as a safe place where education services are delivered is key to accessing a meaningful education in Karamoja, as education will not be acceptable if it is seen as an additional stressor on daily life for communities. Protection issues for children and youths—especially girls—are a large concern among Karamojong communities, which value trust and safety in the education environment above many other things. The location of school facilities (both formal and non-formal) close to or within communities is also critical, as those closest to sedentary villages benefit from higher attendance rates, as they can be visited and monitored by the community throughout the school day.

Relevance of curriculum content and skills development: For many years, one of the barriers to children accessing a meaningful education in Karamoja was the curriculum content offered in schools, which was largely irrelevant to Karamojong society and culture. As a pastoralist community, the cow is central to life among the Karamojong, and the curriculum provided must reflect and recognise the economic and sociocultural needs and expectations of Karamojong society. A large part of the success of non-formal education programmes ABEK is the nature of its thematic curriculum based on learning areas involving culturally recognised topics such as livestock education, crop production, science and environmental management, primary healthcare, food security, local culture and peace and security.

While many parents recognise the importance of the national formal education curriculum in providing reading, writing and mathematics instruction to children, the relevance of other subjects

areas like social studies, science, religious education, etc. can be perceived as reducing the value of the education provided. Given that many Karamojong children do not complete school beyond primary, the inclusion of life skills development, entrepreneurship training and even financial literacy within the curriculum framework would also improve the relevance of the education offered in schools. Additionally, the ABEK curriculum has not been updated in two decades and must be revised if the programme is to continue in the region. Educational outcomes must align with helping Karamojong children and youths gain the literacy, numeracy and life skills necessary to allow them to succeed in today's society and benefit from development over the next five to ten years.

Flexible school programmes: One of the biggest challenges to implementing formal education programming in Karamoja is taking people away from the activities needed for their daily survival to use that time for learning and studying. The introduction of non-formal education programmes like ABEK allowed study schedules to be adapted to suit the daily routines of children, with learning times scheduled around the routines of animals, grazing and domestic work. With the scale-up of formal education programming across the region the timing of learning sessions has become inflexible, which is a limitation for some children and their families that results in missed school time and late arrivals for those enrolled. It is clear based on feedback during interviews and focus group discussions in Karamoja that the flexibility of learning programming is still a critical concern for families and communities, and must be part of the definition of what makes a meaningful education system for the Karamojong. Given the increasingly sedentary way of life among the Karamojong, flexibility at present most notably refers to the daily school timetable and overall school calendar, which must allow space for daily work responsibilities and seasonal adjustments when animals are moved to locations outside of the immediate community for grazing. It also refers in part to maintaining an adaptable curriculum that provides a relevant and culturally sensitive education to Karamojong children and is representative of their values, traditions and lifestyle, including supporting literacy and numeracy acquisition and appropriate skills development, as outlined above.

The importance of teachers from local communities: One of the traditional barriers to the uptake of education programming in Karamoja was a lack of trained teachers from the region. Non-Karamojong teachers were often rejected by local communities as importers of external culture and values, which were counter to the principles and beliefs of the Karamojong. Under ABEK, teachers were identified and trained from local communities. As they came from the culture and society, they understood the needs and challenges of their communities and students very well. Under formal education, identifying teachers among the Karamojong with the abilities and qualifications to teach has proven difficult, as few adults in the community have achieved basic levels of education themselves. However, the deployment of local teachers is a critical component for delivering a meaningful education in Karamoja, as it is key to strengthening local representation in the education sector. Using Karamojong as teachers shrinks any mistrust of education among parents and reluctance to send their children to school.

6 Current context: supply and demand of education services

6.1 Demand for education services

Over the last decade, as disarmament and peace have come to Karamoja, the demand for social services, including education, has increased dramatically in the region. As the region has stabilised, economic opportunities have grown and allowed freer movements of people (albeit in a limited way and unequally throughout the region), increasing the demand for better and more widespread education service delivery. The regional shift from pure pastoralism to agropastoralism has also resulted in changes to the Karamojong's livelihoods and lifestyle, with more people now living in sedentary communities in areas where they can access basic social services like education and health.

Today is still a time of transition in Karamoja, and there are many opportunities ahead—but also many risks. While Karamoja is now relatively peaceful and stable, many of the drivers of conflict remain, including high levels of inequality and marginalisation. To date, Karamoja displays one of the highest percentages of Uganda's population with either no schooling or incomplete primary education; yet primary school enrolment has increased dramatically in the last years, as populations have begun to stay in more sedentary settlements and access education services in these areas. Educational attainment is much higher in urban areas than in rural areas in Karamoja, with Moroto Town and District displaying the highest percentage of children enrolled in education programmes (UNICEF, 2015).

Based on secondary data collected and analysed for this report in the figures below from the 2015 Uganda Human Development Report, the Uganda National Household Surveys for 2005/6, 2009/10 and 2012/13 and the World Atlas data for Uganda, both UPE and USE enrolment in Karamoja have increased overall from 2005 to 2016. In Karamoja, UPE net enrolment rates increased from 28.5% in 2005/6 to 59.1% in 2012/13. Based on this growth level, we estimated that net primary enrolment in Karamoja would continue upward in 2015/16 against the same trend as the growth rate from 2009/10 to 2012/13, reaching 64.2% by the end of 2016. Nationally, the UPE enrolment trends have actually slightly declined over the same period from 84% to 82.3%, indicating that, while national rates are going down, net enrolment in Karamoja is increasing. The same formula was applied to estimate a decline in net primary enrolment nationally from 2012/13 to 2015/16 to 81.4%.

USE net enrolment rates in Karamoja followed a similar trend from 2005/6 to 2012/13 as net primary enrolment rates, increasing from 0% to 4% over the period. Based on this growth level, we estimated that net secondary enrolment in Karamoja would continue upward in 2015/16 against the same trend as the growth rate from 2009/10 to 2012/13, reaching 6% by the end of 2016. Nationally, USE enrolment trends also increased over the same period, from 15% in 2005/6 to 21% in 2012/13. The same formula was applied to estimate a slight increase in net secondary enrolment nationally from 2012/13 to 2015/16 to just over 22%.

The significant jump in net primary enrolment in Karamoja from 2005/6 to 2009/10 is assumed to be a result of Karamoja's disarmament during that period and the increased peace and security in the region. Additionally, donor and GOU efforts to increase education access through infrastructure development increased the number of available primary schools in the region over the same period. The significant jump in national and Karamoja USE net enrolment from 2005/6 is assumed to be a result of the introduction of the government's USE policy in 2007. Additionally,

infrastructure development in Karamoja at secondary level also increased during that same period under donor and GOU efforts.

Both nationally and in Karamoja, USE enrolment rates fall short of UPE enrolment trends, demonstrating low levels of transition from primary to secondary education. Overall, UPE enrolment for Karamoja as a proportion of total national enrolment remains at an average of 1.2%. USE enrolment for Karamoja as a proportion of total national enrolment remains at an average of just 0.5%. These figures demonstrate the need to continue to upscale enrolment and transition efforts in Karamoja for primary and secondary students, despite some recent positive gains in primary enrolment trends in the region.

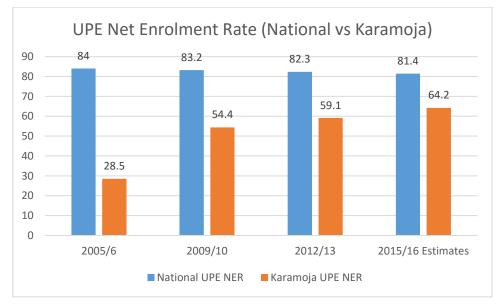
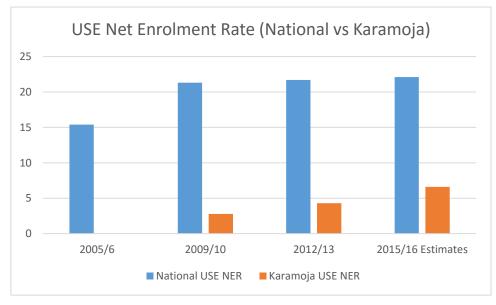


Figure 2: National versus Karamoja UPE enrolment trends





As demonstrated by increasing enrolment trends and interviews with stakeholders carried out during the field visits, renewed value has been placed on accessing education services in Karamoja, especially under UPE, as many communities believe education will help their children achieve the basic literacy and numeracy skills to gain employment and, if money allows, progress

through additional years of school. This does not mean that education indicators in Karamoja are commensurate with those found countrywide, especially in comparison to the central and western regions of Uganda, which consistently rank the highest.

Rather, this upward trend is an indication that education dynamics in the region are shifting and evolving, and that service delivery needs are increasing as relative demand increases among sedentary and semi-sedentary Karamojong populations. As previously explained, this dynamic is not equal across districts, households of various socioeconomic status and towards girls, nor does it indicate that Karamoja's target indicators for education have in any way been met. Instead, it demonstrates that Karamoja is a dynamic and changing region with opportunities for growth and development of its education sector, as described in the section below.

It is important to remember that the desire for flexible formal school programmes that can adapt to household and community needs and livelihoods is still strong in the region, as is the desire for expansion of potential non-formal pathways that can suit the learning needs of overage children and youths, as well as young adults in the communities who never accessed any form of education when they were children. The need for safe, child-friendly and inclusive learning environments is critical, so that communities feel confident sending their children to school.

During the field visits in March and April 2017, many people made positive statements about school, indicating that it was necessary nowadays to send at least some children to school to help the family in times of economic crisis. Overall, people often had a conflicting opinion of education. They acknowledged the growing necessity of gaining access to non-pastoral resources, and they identified the status and corresponding social advantages associated with modern education. However, some also seemed to harbour a mistrust for education based on their past experience with the government. This was mostly true for older Karamojong who had lived through violence and conflict with the government before disarmament. Even for younger Karamojong, the 'government' seemed a nebulous entity, and differences between the state, development organisations, donors and private individuals were not entirely clear, nor did the distinctions hold very much value for them. This finding has been echoed in other reports and evaluations on Karamoja, including those conducted by the World Bank (Krätli, 2001).

Formal school is also perceived as a government intervention, and perceptions of formal education remain mixed with people's general impressions of government as necessary, and sometimes helpful, but often unreliable. This makes them feel that school benefits are also out of their control and dependent on a number of other external factors that can ultimately be more volatile than even cattle keeping or farming, which rely on one's individual ability to maintain livestock or to produce food. In this sense, success is clearly visible in livestock or a harvest, as well as in one's social status in the community. Education, however, is largely dependent on external factors and individuals on whom one must depend —and who can fail you at any time. While education is something that is increasingly viewed as something good to have, very few successful pastoralists would readily exchange their livelihoods for a job and a life in town.

During the field visits, it became clear from interviews with officials and stakeholders that poor families, and particularly poor families that have fallen out of the pastoral economy altogether and moved to permanent settlements, are more strongly oriented towards formal education. For many of them, formal education appears as an alternative to pastoralism and an escape from poverty for their children. They do not, however, have the means to support all their children in school, and sometimes they do not even have enough to send one. When poor children do go to school, it is common for them to move in and out of the school system as resources become available, or not, to pay school fees. This is particularly true of families who can afford to send their children to primary school but not to secondary. Many parents (and children) are discouraged and de-

motivated by this situation and can easily decide that even the investment in primary education, when affordable, is pointless or worthless.

Overall, the majority of teachers, head teachers and district education officials interviewed expressed the belief that modern education is ill-aligned to the pastoral way of life. Some of them saw this as a problem; others seemed convinced that one of the general purposes of education was to pull children away from the pastoral way of life altogether.

Addressing the education of girls in Karamoja

Current research and evidence suggests that poverty and culture are key barriers to the education of girls in Karamoja. Due to limited finances, many families see their daughters as a vital source of income through household labour and, later, marriage (VSO, 2015). In Karamoja, the less educated the girl, the higher the bride price. The best preparation for marriage in this region is to stay at home and help, not get an education in school. According to a VSO report, approximately 35% of girls in Karamoja drop out of school because of early marriage and 23% drop out due to pregnancy. Over 15% of married women aged 20–49 across the region are married by the age of 15 and nearly half are married by the age of 18.

Many schools are not 'female friendly' and do not encourage girls to participate. Many times, according to the education stakeholders interviewed, girls are made to feel like second class citizens or risk sexual abuse. There are very few positive female role models around who embrace education, presenting additional challenges to breaking this cycle. The few girls who do make it to school face challenges similar to other students, including long distances to travel, poor quality teaching, inadequate classrooms and infrastructure, limited books and resources, lack of security, poor infrastructure and low achievement rates. Facilities for girls in schools are also inadequate, and attending school during menstruation is particularly challenging as girls lacks sanitary supplies and school changing rooms, toilets and even doors, limiting privacy.

The National Development Plan focuses on girls' retention, completion, reductions in gender-based violence (including early pregnancy and marriages and Female Genital Mutilation in Karamoja), skills development, and development of sanitary facilities (menstrual hygiene management). The sector is focused on reducing barriers to education for girls at all levels, in line with ensuring equitable access to quality education.

According to a 2015 report by Irish Aid, current interventions to reduce barriers to girls' education in Karamoja include:

'The national strategy on ending child marriage and early pregnancies (2016–2019) was launched in 2015. The strategy prioritises specific activities in Karamoja, including:

- schools in the region have been provided with child marriage education;
- boreholes have been constructed in and around schools across the region to provide clean water and safeguard girls from walking long distances;
- UNICEF supported the development of a Peace Building and Conflict Gender Training Manual for teachers in Karamoja;
- the MOES is promoting menstrual hygiene management training and gender mainstreaming;
- gender-responsive budgeting frameworks; and
- gender mainstreaming programmes in districts and schools, some of which are supported by government and others supported by CSOs specifically targeting girls' education in Karamoja.'

In a bid to further girls education in Karamoja, the following initiatives should be focused on according to the VSO report and interviews with stakeholders in Karamoja during the field visits:

- gender mapping, planning and budgeting at district and regional levels to steer resources towards appropriate initiatives;
- collaboration with UNICEF to address equity in education initiatives under the non-formal education policy, special needs policy and policy about reducing gender-based violence to ensure girls have access to relevant and appropriate education programming for girls in Karamoja;
- community sensitisation and engagement regarding the importance of girls' education, including implementing the strategy for ending child marriage and early pregnancies;
- supporting girls' enrolment through bursaries for school, or encouraging them to attend boarding schools to improve retention and completion rates; and

• supporting menstrual hygiene management programmes, including making and using re-useable menstrual pads with local materials.

6.2 Supply of formal education services

Education services are supplied at the pre-primary, primary, secondary and tertiary levels in Karamoja, as in the rest of Uganda, by the government with support from civil society partners. In the section below, each level of the formal education system is described and information provided regarding how well the education service is supplied to communities accessing formal education in Karamoja. It is important to note that data was not available from all seven districts in Karamoja to include in this section of the report. Data was included in each table from districts that had the information available.

6.2.1 Pre-primary education and Early Childhood Development (ECD)

Worldwide, ECD is widely recognised as a critical to a child's physical, mental and psycho-social development. The Education Act (2008) recognises pre-primary education as the first level of education in Uganda. The ECD education sector policy recognises four programmes: day care centres, home-based centres, community centres and nursery schools. However, the majority of these centres (about 80%) are in the hands of the private sector, and out of the financial reach of most Ugandans (National Integrated ECD Policy, 2016).

In Karamoja, ECD centres are run as community centres in separate locations close to primary schools; some primary schools offer ECD units on site. ECD teachers are largely unqualified teachers under Uganda's education structure and are often community members trained as caregivers. The costs of ECD are met entirely by parents and CSOs supporting programming in specific districts and/or schools.

Nationally, ECD is typically divided into three annual cycles for children aged 3–5. In Karamoja, the average age for children in ECD programmes 2–6. In places where there are no primary schools, children can remain in ECD or pre-primary centres until the age of 8–10. In Karamoja, all active ECD centres are supported and funded by development partners like UNICEF and CSOs like BRAC and Save the Children. From 2012–2015, BRAC ran an ECD programme in Karamoja with support from UNICEF. The centres provided socio-emotional support and education to children and were run by community-identified and BRAC-trained caregivers. The centres were locally constructed with community, largely from mud and wattle.

Over that period, BRAC opened 100 ECD centres across five districts (Napak, Moroto, Nakapiripirit, Amudat and Kotido), enrolling over 3,000 children. According to BRAC, only about 400 of those children entered Primary 1 following completion of their ECD cycle (Interview with BRAC, March 2017). BRAC indicated that this low transition rate was due to a combined lack of access to finances among many families to send their children to formal primary school, as well as a lack of available primary schools in proximity to remote communities for children to attend. Following the closure of the programme, BRAC reported that about 60 of the centres closed due to lack of funding to pay the salary of caregivers, which is about UGX 60,000 (\$16) per month. Another 40 of the centres have been kept open through parent contributions and support. BRAC's new Play Lab project has reopened 35 centres in three districts (Napak, Moroto, Nakapiripirit), which have funding for the next two years.

Save the Children has been the other big player in ECD education in Karamoja over the last years. Today, it supports 24 ECD centres in four districts (Kotido, Napak, Moroto, Nakapiripirit) (Interview with Save the Children, March 2017). This is a large reduction from the past, when Save supported over 100 ECD centres across the region. Over the years they have, due to financial constraints, been turned over to communities and districts to maintain, including covering the salaries for caregivers at the centres and providing learning materials through parent contributions. While some of them have survived, many have closed due to lack of support and funding.

The table below summarises key pre-primary education indicators regarding the supply of ECD services in six districts in Karamoja (data from Kaabong is not included). The information was provided by districts during field visits to Karamoja in March and April 2017. The average preprimary enrolment rate in the districts in Karamoja where data was collected is 11%; simple averages were calculated based on the data provided by districts without weighting for population. National figures were obtained from the MOES 2015 Statistical Abstract. The pupil-to-teacher ratio (48:1), pupil-to-stance ratio (298:1) and pupil-to-classroom ratio (287:1) are all higher in Karamoja than nationally. National averages for the same indicators are 22:1, 23:1 and 31:1. These indicators underscore the supply challenges in Karamoja regarding access to ECD services, most notably regarding the understaffing of teachers in Karamoja in comparison to other regions of the country. There are also significant shortages of latrines and classrooms for pre-primary pupils in Karamoja; these indicators are worse in Karamoja than they are in other regions across the country.

Indicator	Nakapiripirit	Abim	Kotido	Moroto	Napak	Amudat	Average of six districts in Karamoja	National average
Enrolment	2,315	786	1,264	1,608	3,315	2,272	-	-
Gross enrolment rate	12%	6%	6%	13%	19%	18%	11%	-
Number of pre-primary school teachers	74	39	12	54	-	73	_	-
Number of pre-primary schools	80	12	6	19	-	32	-	-
Total number of classrooms	10	9	6	3	-	3	_	_
Total number of toilet stances	10	8	15	2	_	4	-	-
Pupil-teacher ratio	31	21	105	30	28	73	48	22
Pupil-stance ratio	231	63	32	804	42	618	298	23
Pupil–classroom ratio	232	42	32	536	59	824	287	31

Table 2: Key pre-primary school education indicators

6.2.2 UPE

UPE was introduced in 1997 following a political commitment that the GOU would meet the cost of primary education of four children per family. Under the global Education for All framework, this commitment was soon extended to allow all people that wanted to access primary education to do so. The policy's main objectives are to:

- Provide the facilities and resources to enable every child to enter and remain in school until the primary cycle of education is complete;
- Make education equitable in order to eliminate disparities and inequalities;
- Ensure that education is affordable by the majority of Ugandans; and
- Reduce poverty by equipping every individual with basic skills.

UPE is funded through capitation grants to schools to cover the sum of costs per student. Teacher salaries are paid through other funds. UPE grants do not support the additional costs of sending children to school, including uniforms, teaching and learning materials, school feeding and transport. These costs are borne by households. UPE measures have been somewhat successful in improving pupil enrolments in the lower primary grades (Primary 1 to Primary 4), but many pupils do not complete the full cycle of primary education or pass their PLE. Moreover, many parents, communities and education CSOs have spoken out about the low quality of education provided through UPE, particularly in relation to monitoring and incentivising teachers and ensuring children are gaining fundamental reading, writing and mathematics skills.

As the table below shows, the supply of primary education services varies across the region. Gross enrolment rates within the five Karamoja districts included in the table are not consistent across districts, ranging from 21% in Kotido to 45% in Nakapiripirit. On average, the gross enrolment in the five districts in Karamoja where data was collected is 52%, compared to the national average of 109% (obtained from the 2015 MOES Statistical Abstract). The average pupil-to-teacher ratio in Karamoja is also above the national average (52:1 in comparison to 43:1), with even higher pupil-to-teacher ratios in lower primary grades. Karamoja faces a large shortage of primary school teachers—especially those native to Karamoja—which is expected to grow over the next years as enrolment continues to increase. The majority of teachers found in primary schools come from the neighbouring sub-regions of Teso, Lango and Acholi.

There are also significant supply gaps in latrines and classrooms throughout Karamoja, although the pupil stance ratio is lower than national averages. Again, as enrolment increases in the region the current supply of these services will likely not keep pace with demand, a challenge pointed out by all district education officials and head teachers interviewed during the March 2017 field visit. Overall there is a limited supply of teachers, textbooks and infrastructure in primary schools in Karamoja, which negatively affects attendance and completion rates across the region. The PLE pass rate in Karamoja is far below the national average, indicating that children who are attending school are not gaining the basic level of knowledge to pass their national exam. In field interviews, many officials and head teachers indicated that many children in Karamoja choose to repeat Primary 7 and retake the exam until they earn a decent score that will allow them entry into secondary school. Clearly, the provision of a meaningful and quality education in Karamoja, now and in the coming five to ten years, depends to a great extent on the continued provision of improved access to services, including classrooms, teachers, infrastructure and teaching and learning materials.

Table 3: Key primary	school education indicators
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Indicator	Nakapiripirit	Abim	Kotido	Moroto	Amudat	Average of five districts in Karamoja	National average
Enrolment	15,673	28,437	8,242	9,250	11,541	—	-
Gross enrolment rate	45%	109%	21%	43%	43%	52%	109%
Number of primary school teachers	501	524	113	394	207	—	-
Number of primary schools	43	44	24	25	42	-	-
Number of classrooms	291	307	196	174	116	-	-
Total number of toilet stances	286	381	274	304	189	-	-
Pupil–teacher ratio	40	65	73	24	60	52	43
Pupil–classroom ratio	60	81	42	54	99	67	63
Pupil-stance ratio	61	65	30	30	61	49	52
Pupil–desk ratio	6	124	5	8	-	36	-
Pupil–textbook ratio	3	12	60	3	-	20	-
PLE pass rate	93%	98%	4%	94%	87%	54%	88%
Availability of basic learning materials	-	90%	60%	80%	23%	36%	98%
Availability of textbooks	58%	80%	60%	70%	88%	51%	98%
Average class size	85%	92%	55%	53%	99%	55%	53%

Inclusive education

Access to inclusive education or to education for children with special needs is extremely limited in Karamoja, and in many places is almost non-existent. No major development partners are exclusively focused on the provision of inclusive education in their programming; where it does exist, it is included as an add-on to other interventions (e.g. initiatives like SHRP, BRAC) and therefore does not receive the treatment it requires to become fully operational or impactful. Scaling up education programming for children with special needs must be viewed as a standalone investment with specific interventions geared towards ensuring that the programming is effective and reaches children in last mile communities. This requires targeted approaches and funding to ensure uptake and scale, which involves not only school and teacher development initiatives, but also extensive community and parent engagement to ensure that children with disabilities are able to enrol in and attend school. During the field visit and discussions with development partners and stakeholders, only education officials mentioned the need to include special education services as part of mainstream service provision under UPE.

6.2.3 USE

Uganda was the first country in sub-Saharan Africa to introduce USE for students from Senior 1 to Senior 4 (lower secondary) in 2007. USE is implemented through both public and private sector partnerships between the MOES and privately run and supported schools. The USE policy provides a capitation grant tied to the number of qualifying students at each school. The language used in the policy, as per the Education Act of 2008, creates the expectation of fee-free secondary education. In reality, however, USE allocation is small, and no adjustments are made for the location of the school or its actual costs. Parents and households are left to cover the additional

costs of schooling, including for tuition, boarding, textbooks and supplies, uniforms, feeding and transport.

As the table below indicates, the supply of secondary education services across Karamoja is low, with a limited number of government secondary schools available across the five districts where data was collected. Of the schools that do exist in the districts where data was collected, they have a low average enrolment rate of only 6% compared to the national average of 47%. Moreover, they have an inadequate number of teachers—especially those native to Karamoja—and limited infrastructure. Pass rates for both Senior 4 (Uganda Certificate of Education, UCE) and Senior 6 (Uganda Certificate of Advanced Education, UCAE) in Karamoja are also lower than the national average. All told, the supply of secondary education services in Karamoja is very low, representing large gaps in access and equity across the sub-region. Moreover, transition from primary to secondary is low overall, as seen in gross enrolment rate trends from Table 3 to Table 4.

Indicator	Nakapiripirit	Abim	Moroto	Napak	Amudat	Average of five districts in Karamoja	National average
Enrolment	1,245	2,265	702	1,316	57	-	-
Gross enrolment rate	5%	12%	5%	6%	_	6%	47%
Student-stance ratio	78	—	7	_	59	48	35
Number of secondary schools (S4)	4	4	3	3	3	-	_
Number of secondary schools (S6)	2	4	2	-	1	-	_
Number of day schools	0	-	0	-	0	-	-
Number of boarding schools	4	4	3	-	3	-	-
Number of teachers	30	103	31	60	49	_	_
Student-teacher ratio	47	22	18	22	12	24	22
Student-classroom ratio	88	-	27	-	53	56	52
UCE pass rate	85%	-	78%	-	75%	79%	91%
UCAE pass rate	41%	-	70%	-	-	56%	83%

Table 4: Key secondary school education indicators

6.2.4 BTVET

The government began implementing BTVET in 2008 with the aim of reducing the high unemployment rates among youths. Entrepreneurship was later introduced as a subject at both the lower levels of education and at university with the aim of imparting the practical knowledge and skills to enable youths to become job creators. The objective behind these policies and programmes is to create employable skills and competencies relevant in the labour market, rather than just to provide graduating youths with educational certificates. There is limited public financing for BTVET available, and a significant portion of the skills training and education offered is funded by the private sector.

While the evaluation sought to gather information about BTVET institutions in the sub-region, it proved difficult to capture from district education officials due to lack of reliable data and the fact

that many institutions are privately funded and managed. Overall, there are a limited number of facilities. Amudat and Moroto Districts do not have a BTVET, while the other districts have one on average. District education officials reported a lack of alignment between the length of training courses and the time students can afford to attend school, in addition to challenges in the type of courses offered (which are often ill-aligned to available livelihood opportunities for youths in the sub-region). In addition to supply gaps regarding BTVET institutions, there is a limited supply of trained instructors, infrastructure, equipment and up-to-date curricula. As indicated in a previous section, the BTC–VSO programme is seeking to resolve this through its new intervention. Access to BTVET institutions is also limited in Karamoja due to lack of funding for students to attend training courses, even if they qualify for the programmes. This is a challenge for the region, as skilling programming could provide an alternative to poverty and improve household incomes. The majority of youths enrolled in the region's existing BTVETs are not native to Karamoja, meaning that the uptake of BTVET training for local youths is severely restricted.

As identified by Allen *et al.* in the 2016 report on improving Uganda's assessment system, moreover, 'The BTVET sector seeks to develop competence-based curricula and successful continuous assessment while providing, through the work of the Uganda Business and Technical Examinations Board, the rigour and authenticity of assessment and quality assurance expected internationally in this sector. The Examination Board's reports clearly demonstrate recognition of the significant challenges—procedural, resource and capacity-building—involved in ensuring the authenticity (and quality) of class and project work, especially where this counts towards significant qualifications.'

Public versus private formal education

The MOES distinguishes between 'government funded schools' and 'government grant-aided schools'. The latter refers to a school not funded by the government, but which receives statutory grants and aid from the government and is jointly managed by a foundation body and the government. A foundation body can refer to an individual, group, organisation or religious institution. In Uganda, even if a school is considered public and receives some support from the government, the school can be managed by a foundation body. Consequently, the quality and services provided by a public or private school in Uganda depend heavily on the funds, management and engagement by their respective foundation body, but also on parents and communities.

The quality of education varies tremendously from school to school across Uganda, affecting equal opportunities for education access and quality for poorer regions and sectors of society. The distinction between 'higher standard' and 'lower standard' schools is very common depending on the quality of teachers, school infrastructure, instructional materials and language or the overall condition and environment of the school. Private schools are usually described as providing better quality education than public schools on the grounds that they can use a different curricula and their language of instruction and examination is usually English. Another reason revolves around the quality of teachers and resources. However, while this impression is generally held by the majority of the population, there is only moderate evidence that students in private schools achieve better learning outcomes.

6.3 Supply of non-formal education services

Both alternative and non-formal education are identified as any organised educational activity outside of the established formal system, whether it operates separately or as an important feature of some broader education programme. The GOU recognises non-formal education as a form of education provision, but has not yet approved the draft national policy on non-formal education in the country. Non-formal education has the potential to meet the diverse educational needs of societies that are impeded or excluded from, or averse to, participating in formal education systems and institutional settings. Such situations may include conflict, a remote locality with weak educational infrastructures, refugee communities or communities with semi-nomadic or pastoralist

lifestyles, or communities where domestic duties are carried out by children that are essential to a family's survival.

6.3.1 ABEK

The supply of non-formal education programming in Karamoja has largely been implemented through the ABEK programme in a partnership between the Ugandan government, Save the Children and UNICEF. ABEK was initially designed as a non-formal approach to providing basic education to children and youths (aged 6–18 years) from pastoralist communities. ABEK is delivered in three levels, each corresponding to the early years of formal primary school. After completing all parts of the cycle, learners who wish to do so can be transferred to formal schooling, entering at a level commensurate with their skills and capabilities. ABEK follows an 'open door policy', inviting out-of-school youths and adults to participate in, and be part of, ABEK at any given time. Learners can also attend ABEK at convenient times for their learning, such as early morning or late afternoon.

At the height of the ABEK programme, Save the Children was supporting 209 ABEK centres across the sub-region, some of them mobile (Interview with Save the Children, March 2017). Today, only 52 of those centres are still supported actively by the organisation. A decline in funding from Save the Children offices abroad due to a shift in focus to other programming in the country has restricted the direct support Save the Children in Uganda can provide. The remaining centres were turned over to communities and local governments to run and manage. Due to lack of available resources, however, especially for paying teachers and providing teaching and learning materials, the majority of them are not supported by government budgets. Instead, they are sustained through community and parent contributions, which are limited. As a result, many of the centres have either closed down or fallen into disrepair. Save pays its ABEK teachers around UGX 276,000 (\$76) per month (Interview with Save the Children, March 2017). In some districts and ABEK centres, the government has formally 'counted' the centres as part of its education programming, offering money from their budgets to cover the salary of teachers. However, not all centres and teachers have been included in this intervention, leaving some without much-needed support. Government budgets do not cover any other costs for the centre to run, including provision of teaching and learning materials and school feeding.

While ABEK has offered a clear non-formal pathway for education for many children in Karamoja in their first years of school, many have been unable to enter the formal system after ABEK. Where some have transitioned, most have not made it past Primary 7. One of the challenges pointed out by Save regarding transitions between the non-formal and formal school system is that the ABEK programme's curriculum does not align to the national primary curriculum of Uganda. While this has been an asset in the past, ensuring Karamojong lifestyle and culture is a cornerstone of the materials, they have not been updated in 20 years, meaning that the competencies taught in the materials do not align to the current national curriculum (revised in 2007). This means that children exiting ABEK have trouble matriculating into the formal school system at higher grades (e.g. above Primary 1, 2 or 3). One possible solution to improving implementation to the programme posed by both Save and education officials met included realigning the curriculum so a student graduating from ABEK can sit the national PLE, or enter a higher grade in primary once they exit the ABEK programme. In remote areas of Karamoja where there are still no primary schools, programmes like ABEK still offer the only chance for education access for children. As the formal system struggles to expand and offer better access across the sub-region, the role of non-formal education programming—especially free schooling —is important to ensure a basic level of equity in school access.

6.3.2 Non-formal youth entrepreneurship and financial skills training

Across Karamoja, youth development programming focuses on the delivery of functional skills and training to youths and young mothers and fathers who missed out on education in their early years. Programmes run by CSOs like Restless Development and VSO support youth groups to engage in training programmes that offer them basic skills development to start small businesses and manage personal and family finances. While still limited in number, they have been successful in encouraging out-of-work youths to engage in income-generating activities that have increased household incomes and ensured that young families can afford to send their children to formal primary school (ODI, 2013). The supply of these services is sporadic across the region and depends on the initiatives spearheaded by CSOs operating in Karamoja, which are dependent on donor funds to execute their programming.

6.4 Mismatch between supply and demand

The education system throughout the Karamoja region suffers from low qualities of education, teacher absenteeism and low enrolment and completion rates compared to the overall population. Significant strides in reforming Uganda's educational sector since 1997 have shown some, although still limited, improvements in the quality of and infrastructure for education in Karamoja. As communities begin enrolling and sending their children to school in increasing numbers, there is—and unless the GOU increases investments, there will increasingly be—a growing mismatch between the demand and supply of education services in the region that will struggle to keep pace with population growth and increasing demand. Mismatch between demand and supply of education services is present in regard to:

- the enrolment and retention of students across districts throughout the sub-region;
- completion rates for primary and secondary education, which are low throughout the region, in part due to inadequate supply of services;
- inequality in education access at the UPE and USE level between male and female students;
- the transition beyond non-formal education programmes to formal schooling, and from primary to secondary education;
- access challenges related to shortages of schools, facilities in existing schools, native Karamojong teachers, teaching and learning materials, textbooks and desks;
- quality and equity in regard to the appropriateness of the education services accessed and delivered to the population; and
- the hidden costs of schooling, which render formal education, especially at the secondary level, unaffordable for the majority of households and well beyond the reach of disadvantaged families. USE has failed to reach the poorest students, who are unable to secure even minimal support from their families for the costs of schooling.

The table below explains the mismatch between the overall population of children of primary school-going age (e.g. 6–12 years old) in five districts of Karamoja versus those actually enrolled in school by identifying the total out-of-school population in these districts. The national population for the 6–12 age group for the districts included in the table was obtained from UNICEF-funded Uganda Bureau of Statistics (UBOS) sub-region population projections from December 2016. The UPE enrolment figures were obtained from the districts. The calculation for the out-of-school population estimate was derived by calculating the difference between the 6–12 year population and the UPE enrolment figures. The out-of-school population does not take into account the number of children enrolled in ABEK centres, as this data was not available from the districts at the time of this study. As indicated below, there is a significant population of children across the sub-region who are out of school, despite gains over the years in enrolment rates in formal education

programming. An average of 60% of all 6–12 year olds in Karamoja are currently not accessing formal primary school.

Given the current gaps in the number of teachers, classrooms, latrines, teaching and learning materials and other school facilities, if enrolment in Karamoja increases, these supply gaps will be greatly exacerbated as there are not enough schools and teachers to meet the growing demand. While it is likely that not all out-of-school children across Karamoja will enter primary school, given the trends in increasing enrolment rates in the region, it is highly likely that demand and enrolment rates will outpace the current supply of education services in the next five to ten years if the number of schools and facilities in existing schools are not expanded.

District	6–12 year population	UPE enrolment	Out-of-school population
Nakapiripirit	34,665	15,673	18,992
Kotido	39,333	8,242	31,091
Moroto	21,616	9,250	12,366
Napak	32,172	16,249	15,923
Amudat	26,683	11,541	15,142
TOTALS	154,469	60,955	93,514

Table 5:	Example of UPE enrolment gaps and out-of-school population in selected
	districts

The table below explains the mismatch between the gaps in enrolment for the overall population of children in Karamoja who are eligible for attending secondary school versus those actually enrolled in secondary school by identifying the total out-of-school population in the region. The population in need for the districts included in the table was obtained from UNICEF-funded UBOS sub-region population projections from December 2016. The USE enrolment figures were obtained from the districts. The calculation for the out-of-school population estimate was derived by calculating the difference between the population in need and the USE enrolment figures.

As indicated in the table, a significant population of children across the sub-region are out of school, despite gains over the years in enrolment rates. An average of 70% of children eligible to enter secondary school following completion of primary in Karamoja are currently not attending secondary school. Given the current gaps in the number of teachers, classrooms, latrines, teaching and learning materials and other school facilities, if secondary school enrolment in Karamoja increases, these supply gaps will be greatly exacerbated as there are not enough schools and teachers to meet the demand. Moreover, some districts completely lack a secondary school, meaning the mismatch between supply and demand for secondary education in those areas is even more pronounced.

Table 6:	Example of USE enrolment gaps
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District	Population in need	USE enrolment	Population not enrolled in USE
Nakapiripirit	4,150	1,245	2,905
Abim	7,550	2,265	5,285
Kaabong	4,410	1,323	3,087
Moroto	1,120	336	784
Napak	4,387	1,316	3,071
Amudat	190	57	133

The two tables below identify the gaps in provision of primary and secondary teachers in Karamoja and the number of additional teachers needed if student enrolment increases. The enrolment figures in each table were derived from Tables 5 and 6 respectively. The calculations for the number of additional teachers required is estimated based off of the current Karamoja teacher–student ratios, assuming schools achieve 100% enrolment. This ratio likely still understates the need for additional teachers in schools across Karamoja, as the teacher-student ratio in the sub-region exceeds the national average and the policy recommendations for teacher–student ratios in both primary and secondary schools in Uganda. If those ratios are applied, the need for more teachers in both primary and secondary schools in Karamoja increases. Across the sub-region, also, there are already existing shortages of teachers in existing primary and secondary schools in comparison to the number of students currently enrolled in and attending school today. If the enrolment is to increase in primary and secondary schools across the region over the next five to ten years, the pupil-to-teacher ratios will also dramatically increase unless additional teachers are added. On average, Kotido District presents the largest gaps in primary teacher needs, while Abim District presents the largest gaps in secondary teacher needs.

District	Current enrolment	Additional enrolment 2017	Additional enrolment 2018	Additional enrolment 2019	Additional enrolment 2020	Additional enrolment 2021	Additional teachers needed to maintain current Karamoja student-teacher ratio
Nakapiripirit	15,673	1,348	1,464	1,590	1,726	1,875	151
Kotido	8,242	709	770	836	908	986	79
Moroto	9,250	796	864	938	1,019	1,107	89
Napak	16,249	1,397	1,518	1,648	1,790	1,944	157
Amudat	11,541	993	1,078	1,171	1,271	1,381	111

Table 7:Additional primary school teachers required

 Table 8:
 Additional secondary school teachers required

District	Current enrolment	Additional enrolment 2017	Additional enrolment 2018	Additional enrolment 2019	Additional enrolment 2020	Additional enrolment 2021	Additional teachers needed to maintain current Karamoja student-teacher ratio
Nakapiripirit	1,245	666	723	786	853	926	186
Abim	2,265	1,212	1,316	1,429	1,552	1,686	338
Kaabong	1,323	708	769	835	907	985	197
Moroto	336	180	195	212	230	250	50
Napak	1,316	704	765	830	902	979	196
Amudat	57	30	33	36	39	42	9

The three tables below describe the mismatch between the current number of schools available in Karamoja from primary to tertiary (Table 9), the number of additional schools required according to district estimates (Table 10) and the number of additional schools required according to policy-based estimates (Table 11). All the data presented in these tables was obtained from district education officials in Karamoja during field visits in March and April 2017. To obtain the estimated number of schools required in Table 11, the government policy of one primary school per parish and one secondary school per sub-county was applied against reported figures from education officials regarding the number of parishes and sub-counties in their respective districts.

There is a need for additional schools in Karamoja across every category. While there are many more primary schools in the region in comparison to other school categories, there is still a need to increase the number of primary schools to meet even the current levels of student demand and to ensure there are primary schools available close to communities and within each parish (as per government policy). In regard to secondary schools, Kotido District completely lacks a secondary school (either private or government), while Moroto lacks an S5-6 secondary school (either private or government). Data was not available for Kaabong. Generally, the number of additional new schools required according to policy estimates is higher than those identified by district officials.

This mismatch is likely a result of district officials identifying a basic need for schools in their areas, as opposed to applying a formula for identifying the number of schools needed based on the number of parishes in the district.

Many of the community primary schools identified in Table 9 are seeking coding from the government to be recognised as government-aided primary schools, which means they will become eligible for funding from the government through capitation grants and teacher salaries. This is especially critical in Kotido and Abim Districts, as they urgently require more schools to meet the enrolled school-going age population. Some of the existing community schools are already staffed by qualified teachers who are volunteers paid by fees collected by the school from household contributions, but currently do not access the government payroll as their schools are not recognised. This places an even higher burden on household education costs throughout the sub-region, as families are made responsible for supporting the full burden of education costs when there is a lack of access to any school, or a school recognised by the government as part of the formal system. According to the education officials interviewed during the field visits, it can take up to two years for the government to recognise a school and code it. Some schools have been waiting even longer for recognition.

	Number of currently available schools									
District	UPE	Community primary	USE (S1– S4)	USE (S5– S6)	BTVET	Tertiary				
Nakapiripirit	43	7	4	2	1	0				
Abim	34	10	4	4	1	0				
Kotido	14	18	0	0	0	0				
Moroto	16	9	1	0	0	0				
Napak	41	-	3	-	0	0				
Amudat	42	-	3	1	0	0				

Table 9: Number of schools currently available in Karamoja

Table 10: Additional new schools required (district estimates)

District	UPE schools	USE schools (S1–S4)	USE (S5–S6)	BTVET	Tertiary
Nakapiripirit	10	4	0	1	0
Abim	7	5	-	_	1
Kaabong	-	-	-	_	-
Kotido	18	3	2	0	0
Moroto	14	3	1	2	1
Moroto Town Council	-	-	-	-	-
Napak	-	-	-	-	-
Amudat	-	-	-	-	-

District	UPE Schools	USE Schools (S1–S4)
Nakapiripirit	34	8
Abim	36	7
Kaabong	-	-
Kotido	25	5
Moroto	28	4
Moroto Town Council	-	-
Napak	38	10
Amudat	9	3

Table 11: Additional new schools required (policy-based estimates*)

* Government policy is one primary school per parish and one secondary school per sub-county

The tables below describe the mismatch between the availability of infrastructure in schools from pre-primary to secondary in comparison to the current need. Data was obtained from district education officials during the field visits in March and April 2017. Like the tables above, there are significant gaps throughout the sub-region in regard to the types of structures available versus those that are needed at each level of the education system. The ratios suggest there is a mismatch between the current number of schools and school enrolment, with a need to add additional schools, teachers, textbooks, latrines, etc., as the school population grows.

It is important to note that many school leaders and education officials interviewed during the field visits identified that the long distances travelled from communities to the nearby primary school presented a barrier to education uptake in the region, as the walk to school is often long and unsafe. Many individuals identified the need to construct boarding facilities in primary schools to resolve this problem and ensure pupils were given a safe place to stay so they could focus on their studies without having to worry about safety or distance while travelling to school, or being taken out of school for work in the household. While the total number of boarding facilities required to meet this need was not captured, based on the schools visited during the data gathering exercise it is evident that this investment would be heavy and require intensive funding and support to become possible. When examining access needs in Karamoja, however, investing in boarding facilities is something that should be considered according to the education officials and community members interviewed.

Room type	Total structures available	Structures under construction	Additional needed
Classrooms	22	6	102
Computer lab	0	0	0
Latrine stances	27	4	194
Libraries	0	0	0
Office	6	2	99
Staff rooms	1	0	96
Teacher houses	4	0	40
Workshops	0	0	0

Table 12: Pre-primary: availability of infrastructure by building type

Room type	Total structures available	Structures under construction	Additional needed
Classrooms	968	12	279
Computer lab	0	0	114
Latrine stances	1245	30	685
Libraries	8	0	122
Office	121	0	17
Staff rooms	3	0	127
Teacher houses	651	12	1011
Workshops	0	0	46

Table 13: Primary: availability of infrastructure by building type

Table 14:Secondary: availability of infrastructure by building type

Room type	Total structures available	Structures under construction	Additional needed
Classrooms	102	8	46
Computer lab	8	1	10
Latrine stances	152	20	62
Libraries	4	0	13
Office	31	0	24
Staff rooms	7	0	7
Teacher houses	100	19	160
Workshops	1	0	11

The education system still overall lacks major inputs at each level of the formal system to deliver a quality, accessible and equitable education to the people of Karamoja. The mismatch between supply and demand of education services in Karamoja is further summarised in the table below.

Table 15:Summary of mismatch between supply and demand of education services in
Karamoja

Basic and secondary formal education

- inadequate schools (supply) to meet the education needs of Karamoja's growing population (demand);
- inadequate school facilities (supply in existing schools) to meet the needs of current school populations (demand), especially regarding:
 - classrooms;
 - textbooks and other reading materials;
 - instructional materials;
 - desks;
 - safe water;
 - separate latrines for boys and girls:
 - sanitary pads and facilitates for girls during menstruation;
 - administrative blocks; and

- dormitories for students so that they do not have to travel long distances daily to school, and to
 ensure they stay in school rather than being kept out to perform domestic work or other forms of
 household labour (in the case of primary pupils);
- teachers' houses (supply), especially for teachers assigned to Karamoja from other regions of Uganda (demand);
- inadequate numbers of qualified teachers (supply), especially those native to Karamoja; this affects
 delivery, especially of early primary literacy initiatives and the instruction of students in their mother
 tongue according to the language of instruction policy by the GOU (demand);
- inappropriate training and support supervision for teachers (supply);
- the presence of numerous community schools seeking government funding but not yet approved (demand for registration and recognition to meet the needs of communities without government-aided primary and secondary schools); and
- the lack of bursaries (supply) to assist families in affording the costs of secondary education— many students who qualify for entry into secondary education cannot attend due to poverty (demand).

BTVET education

- inadequate schools (supply) to meet the needs of Karamojong youths who want to enter BTVET training (demand);
- the curriculum in available facilities (supply) does not match the potential market opportunities and livelihoods available in Karamoja to graduating youths (demand), reducing the impact of training as it does not provide a pathway to employment;
- the curriculum in most facilities does not support the growth of entrepreneurial or financial management skills (supply), leaving graduating students with the technical skills to work in a trade, but not the business skills and acumen to run a successful enterprise (demand); and
- the lack of bursaries (supply) to assist families in sending their children to technical or vocational education and training (demand).

Non-formal education programming

 the need to revise approaches to non-formal education, allowing for more diverse interventions like accelerated learning programmes at the primary level and non-formal skills training, including functional literacy and numeracy for overage youths who missed out on school (demand based on gaps in current provision of non-formal education services).

7 Current context: barriers, opportunities and possible interventions to improve uptake, scale-up and completion of meaningful education in Karamoja

7.1 Overview of barriers to meaningful education identified during field visits

Reports from the field identified household poverty, negative attitudes towards education and various aspects of poor quality of education as key factors affecting school uptake, enrolment, attendance and completion.

Negative attitudes towards education were identified as one of the main reasons for low completion rates in school. Cattle rearing, early marriage for girls (including dowries), and growing business opportunities due to rapid urbanisation and development were identified as opportunities yielding better, quicker and more tangible economic returns than investments in education. Harmful social norms continue to affect young girls disproportionately. Additionally, the costs of hiring external household labour for daily domestic work, chores and cattle rearing are seen as too costly for families, who often prefer to keep their children working at home rather than sending them to school.

In terms of **affordability**, focus group discussants voiced concern over the fees required by schools for the costs of additional teachers, subsidies to support WFP supplies for feeding in terms of cooking oil, salt and cooks, school uniforms and textbooks and school supplies. At the secondary level, few children enter or complete secondary education due to the high cost of tuition and other fees.

The table on the next page identifies the costs met by government and households to send children to school from primary to secondary to BTVET or a regional Primary Teacher's College (PTC). The figures were reported by government education officials in Karamoja during the field visits in March and April 2017, as well as being drawn from expenditure reports compiled by district planning offices and official capitation disbursements from GOU in 2016. As evidenced in the table, each level of education—even ABEK—entails a cost for households. While government remains a significant funder of national education services in terms of overall service delivery, households incur significant burdens in sending their children to school. As a child progresses through the education system, their costs increase.

For poor families in Karamoja, these hidden costs of schooling represent one of the most significant barriers to the uptake and completion of education—especially in relation to progression from primary to secondary school. This limits the ability of households in the region to send their children to school, or causes them to choose which children they can send. Given that the average household size in Karamoja is seven and the average monthly income per adult in the household is UGX 27,695 (UNDP, 2015), this situation does not appear as though it will change significantly in the coming years—a reality that will keep more children out of school and not learning.

According to the National Education Accounts for Uganda, in 2013 the government bore 34% of education expenses nationally. Households bore 57%. The remaining costs (9%) were borne by external funding from partners and other private sources (NEA Visual Report, 2016). This percentage represents one of the highest household expenditures in the world for education. The government expenditure on education in Uganda stands at 2.1%, which is below the international benchmark of 4–6% of the country's GDP, or between 15–20% of total public expenditure. These figures have further declined in recent years, while costs to households have increased (NEA,

2016). Given that Uganda has the youngest population in the world, this is a worrisome trend, since households will continue to be the main financiers of education as long as it persists. Even though the government should be the most important funder of education in a country, the norm in Uganda—as in many countries in the world—is that households assume the burden of paying for education as the government is often unable, or unwilling due to factors such as corruption and low fee generation from taxes, to pay more (NEA, 2016). When the costs for households are too heavy, issues of equity and accessibility to education arise.

Description	Karamoja costs in UGX	Frequency
UPE capitation grant per child	7,000	annually
USE capitation grant per child (S1–4) government	41,000	annually
USE capitation grant per child (S5–6) government	45,000	annually
USE capitation grant per child (S1–4) private	47,000	annually
USE capitation grant per child (S5–6) private	85,000	annually
Average costs per household pre-primary per term (private)	50,000-100,000	per term
Average costs per household pre-primary per term (community or faith based)	5,000–10,000	per term
Average costs per household primary day scholar per term (government school), fees only	2,000-10,000	per term
Uniform costs	15,000–30,000	1–2 years
Books, pencils, etc. (scholastic materials)	5,000–10,000	per term
Average costs per household primary boarding per term (government fees only)	20,000–20,0000	per term
Non-fees costs	50,000–200,000	per term
Average costs per household ABEK per term (fees only)	-	-
Books, pencils, etc. (scholastic materials)	5,000	donor funded
Average costs per household secondary S1–4 boarding (government fees only)	100,000–540,000	per term
Uniform costs, books, pencils, etc. (scholastic materials)	300,000–500,000	per term
Average costs per household secondary S1–4 boarding (private fees only)	250,000–600,000	per term
Uniform costs, books, pencils, etc. (scholastic materials)	300,000–500,000	per term
Average costs per household secondary S5–6 Boarding (government fees only), arts	350,000–500,000	per term
Average costs per household secondary S5–6 Boarding (government fees only), sciences	400,000-600,000	per term
Uniform costs, Books, pencils, etc. (scholastic materials)	300,000–500,000	per term
Average costs per household secondary S5–6 Boarding (private fees only), arts	350,000–500,000	per term
Average costs per household secondary S5–6 Boarding (private fees only), sciences	400,000-600,000	per term
Uniforms costs, books, pencils, etc. (scholastic materials)	300,000–500,000	per term

Table 16:	Expected costs of	education services	(government and h	nousehold level)
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Average costs per household BTVET (certificate), fees only	110,000–360,000	per term
Scholastic materials	300,000–500,000	per term
Average costs for PTC per student (per household) over two years	750,000	One-off fees
Scholastic materials	105,000	per term

The table below provides an estimate of projected government costs to provide capitation grants to primary and secondary schools over the next 10 years, if trends in net enrolment in primary and secondary school continue at pace based on the projections in figures 2 and 3. The calculations do not adjust for inflation. Based on data collected in the field and Karamoja-specific trends, it is expected that as the demand for education will continue increasing in the coming years, additional inputs from GOU, donors and civil society partners to ensure the supply and funding of education services will also be required. While these are only estimates, they provide a picture of the costs required to grow education access and service delivery for students in the coming decade.

					Overall	Enrolment				
					Overall	Enronnent				
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Projected government primary education costs										
UPE enrolment*	130,558	141,785	153,012	164,239	175,466	186,693	197,920	209,147	220,374	231,601
Government total cost ('000 000)	UGX 914	UGX 992	UGX 1,071	UGX 1,150	UGX 1,228	UGX 1,307	UGX 1,385	UGX 1,464	UGX 1,543	UGX 1,621
Government annual cost (GBP)	£196,117	£212,982	£229,846	£246,711	£263,576	£280,440	£297,305	£314,169	£331,034	£347,898
		Proje	cted govern	ment secon	dary educat	ion costs				
UPE enrolment [^]	6,908	10,569	14,230	17,891	21,552	25,213	28,874	32,535	36,196	39,857
Government total cost ('000 000)	UGX 283	UGX 433	UGX 583	UGX 734	UGX 884	UGX 1,034	UGX 1,184	UGX 1,334	UGX 1,484	UGX 1,634
Government annual cost (GBP)	£60,779	£92,989	£125,200	£157,410	£189,621	£221,831	£254,042	£286,252	£318,463	£350,673

Table 17: Anticipated increased costs to GOU for primary and secondary education services 2016–2025

*11,227 additional students per year; ^3,661 additional students per year

Finally, as far as various qualitative aspects of education are concerned, pervasive **teacher absenteeism** and **high pupil-to-teacher classroom ratios** emerged as the main hindrances to the effective delivery of basic education services. The **low quality of teachers** was also cited as a reason for keeping children out of school, as it leads to poor education outcomes even when children complete the full cycle of primary education.

Respondents also highlighted a real challenge in reducing teacher absenteeism due to the lack of teacher accommodation, forcing some school administrators to convert valuable classroom space into homes for their teachers. Teacher accommodation is an issue in many schools in Karamoja, as the majority of teachers have been posted to schools from outside the region. As they live far from home, government policy dictates that they receive accommodation on site at the school so they can fulfil their teaching obligations. When this is not provided, some teachers use it as an excuse to abscond from their positions. In turn, lack of boarding facilities at primary level keeps some children out of school due to long distances and the pull of domestic work when they are at home.

It is important to note that low completion rates may not necessarily be the result of insufficient inputs, but rather the lack of complementary investments beyond the education sector, such as targeted social protection interventions and other initiatives to stop violence in school and harmful social norms. These latter factors were outside of the scope of this study.

In interviews and focus group discussions during the field visits, the following barriers were also identified as preventing the uptake, scale-up and completion of a meaningful cycle of education for children in Karamoja.

Table 18:Summary of barriers and constraints preventing uptake, scale-up and
completion of education

Sociocultural demand-related barriers

- pastoralist livelihoods, for which skills taught in schools are not considered very useful;
- a history of negative attitudes towards formal education, which is seen as polluting traditional culture and Karamojong values;
- limited education among adults (especially women) and access to formal schooling; and
- a lack of value placed on educated girls in society.

Economic demand-related barriers

- high (and hidden) costs of schooling at primary and secondary levels that place an extra burden on households to cover the costs of education outside of government-provided tuition grants;
- a high poverty rates among families, limiting their ability to make financial contributions;
- large family sizes, limiting the affordability of education for all children in the family; and
- households' need for labour and income, including that of school-age children.

Access-related supply barriers

- few ECD centres;
- ABEK centres reducing owing to lack of funding to keep them running;
- insufficient numbers of formal primary and secondary schools across all districts;
- lack of accreditation (coding by government to become grant-aided) of the majority of community schools (both basic and secondary), the only means of education offered in remote areas;
- limited access to affordable vocational and technical training;
- limited provision of functional literacy and numeracy training for overaged youths who will not access the formal education system;
- lack of opportunities for tertiary education within Karamoja;
- inadequate provision of inclusive education; and
- long, inflexible school hours and distance to formal schools.

Quality supply barriers

- inadequate number of trained teachers (and training opportunities for upskilling);
- lack of locally relevant, up-to-date curricula;
- inadequate supply of appropriate materials and resources for quality teaching and learning;
- inadequate monitoring and support supervision for schools and teachers;
- lack of up-to-date and relevant data to inform good decision-making, planning and budgeting; and
- limited funding for the vast array of quality education improvements required.

Other barriers

- gaps in supply of school feeding depress attendance; conversely, when food is provided it drives and distorts demand;
- corporal punishment deters enrolment/attendance;
- inadequate access to safe water (supply-related);
- poor health of pupils negatively affects attendance and completion;
- early marriage among girls diminishes demand; and
- childcare challenges—older siblings are forced to bring younger siblings to school and care for them while studying.

Coordination supply barriers among local and national government

- fragmented support to service delivery from national to regional levels;
- unclear coordination structure (and weak where it does exist);
- inequitable responses to district-specific needs and interventions;
- lack of regional approach to planning, budgeting and coordination; and
- lack of adaptation of national plans and strategies for Karamoja (these exist only in draft form, and have not been put into action).

Coordination supply barriers among donors

- large focus to date on access, with little emphasis on quality; and
- some, but limited, coordination of efforts through the Karamoja Development Partners Group.

Coordination supply barriers among civil society

- small, fragmented programming delivered according to decisions made independently of government and not always aligned to district needs or priorities;
- lack of coordination among partners within and between districts;
- little control by districts of education service delivery by partners;
- little information shared with districts by education partners operating in their areas; and
- lack of sharing and learning among actors.

When assessing the challenges with closing the gaps between demand and supply in Karamoja, it is important to consider the needs of the sub-region in comparison to other regions throughout the country. Karamoja already receives a significant amount of donor and government aid across many sectors, including education. This is largely because the need to scale up services to the population is so great, and the infrastructure still so underdeveloped after decades of conflict and neglect. When reflecting on whether Karamoja should receive a greater share of limited public and private resources than other regions, this situation—and the importance of leaving no one behind—must be taken into account.

Overall, however, if Uganda is to meet national targets for growth under the current National Development Plan, regions like Karamoja must receive a greater portion of resources from the national budget to allow them to grow alongside other regions, and a protracted long-term investment is critical to allow the region to meet national development indicators. This is especially the case for education.

7.2 Education pathways and opportunities

The diagram on the next page outlines the various formal and non-formal education pathways available to children in Karamoja. In the summary that follows, district education officials have identified the opportunities to accessing and completing each level of the formal and non-formal education system, as well as possible ways to reduce barriers and expand opportunities to improve uptake, completion and scale-up of a meaningful education in Karamoja. A detailed table of their feedback is included in Annex B. It is important to note that there is a large difference between Karamoja and Uganda as a whole in the average school-going age for children, because children in the sub-region often start school late (i.e. when they are older) and do not complete on time. The resulting differences are described in the table below, which is based on discussions with education officials in March and April 2017. This is a result of challenges in access and retention for children in the sub-region, who often start school late and do not complete on time.

Table 19: Variation in average school age: national versus Karamoja

Stage	National Average	Karamoja Average
Average age in pre-primary	3–5 years	2-6 years
Average age in ABEK	Not applicable	5–9 years
Average age at primary entry	6 years	7–9 years
Average age in primary	6–12 years	7–15 years
Average age in lower secondary (S1–4)	13–16 years	15–20 years
Average age in upper secondary (S5–6)	17–19 years	20–23 years
Average age in BTVET	17–19 years	20–23 years

Figure 4: Education pathways

Education Pathways



The diagram above was presented to education officials at the workshop in Karamoja in April 2017. They identified barriers to completing each of the formal and non-formal pathways, and suggested actions to reduce those barriers and expand opportunities, which are detailed in Annex B. The following table summarises the recommendations for improving education access, quality and equity in Karamoja that were made by government, civil society, donors, school leaders, youths and community members interviewed during the field visits.

Table 20:Summary of recommendations for improving education service delivery in
Karamoja

Creation of new and revision of existing non-formal pathways

- accelerated learning programmes (condensing the full 7-year cycle of primary education into 3–4 years of school to reduce the time it takes to complete school);
- revised ABEK model to cater for needs of communities today and revise the curriculum; and
- provision of functional literacy, numeracy, life skills and entrepreneurship training and education
 opportunities for youths who will not enter the formal system, or who cannot continue in the formal
 system due to lack of economic resources to afford secondary school, BTVET or tertiary
 education.

Renewed support for formal pathways

- ensure uptake and provision of ECD;
- better access to basic education—identification of a comprehensive basic education programme that goes beyond literacy and numeracy to include transferrable and life skills;
- funding to help students transition from primary to secondary and complete all cycles of formal education (i.e. bursaries for students); and
- whole school model—safe schools and spaces, school governance, teacher support and training, advocacy and engagement of parents and communities.

Creation of a special plan and intervention for education in Karamoja that stems from community, district and regional needs and aligns government and civil society actors to fund and implement:

- **multi-sectoral system strengthening**: coordinated programming across the agriculture, health, education, social welfare and gender sectors, as all have an impact on uptake and delivery of education services in Karamoja; and
- establishment of a regional coordination body specifically for education in Karamoja that involves government, civil society and donors and is responsible for:
 - creating a joint action plan for education;
 - funding the joint action plan for education;
 - ensuring equitable distribution of resources and programming support across districts;
 and
 - prioritising needs based on analysis of supply and demand factors across the region and within and between districts.

8 Conclusion: recommendations for DFID to add value to existing efforts by government, other donors and partners

8.1 Overview of recommendations

Based on the above analysis, equitable delivery of quality education in Karamoja will take a considerable amount of time, effort and funding. The region, however, has pressing needs that must be met in the short term to ensure availability and uptake of services in proportional to the growing population in the long term. Proposed interventions to address these needs can be grouped into two categories: core interventions that fall within the remit of DFID's new SESIL programme and add value to ongoing government and development partner efforts; and non-core interventions that are important, but potentially fall outside of DFID's existing commitments in education under the SESIL programme. Many of these align with the efforts suggested by stakeholders, while some may fall outside of the scope of DFID's intervention in the next five years. Other initiatives could be integrated into a longer-term regional plan (e.g. running for 10–15 years). It is important to note that the GOU plans to increase the number of districts in Karamoja by carving Nabilatuk District out of Nakapiriprit District in 2018 and Kamien District out of Kaabong District in 2019. This implies that the DFID education component needs to plan for factoring in these additional districts in both its short and long-term regional plans.

The SESIL programme comprises three core components delivered through three delivery channels. The **building strong foundations** component provides technical assistance to the MOES and activities to support improved inspection, teacher management and support, and improving the quality of leadership, management and accountability in poor performing districts, including through harnessing the potential of digital technology. The **enhancing assessment and exams** component provides technical assistance to develop a resilient, self-sustaining and self-improving assessment system to improve the quality of exams and ensure that data on learning outcomes are used to drive improvements from the level of the classroom up to central government. The **supporting a mixed economy** component provides support to a network of secondary schools that are currently part of a Public Private Partnership with GOU, and will also support GOU to create an effective enabling environment for the increasingly diverse range of education providers at pre-primary and secondary levels. Under the SESIL programme, support to Karamoja is a key area.

The core recommendations in this section fall mostly within component 1 of the SESIL programme. Core recommendations related to secondary school and skilling programming fall within component 3. Criteria for inclusion are:

- a strong alignment with sector policies and objectives for delivery of a quality education—and a meaningful one in the Karamoja context;
- consistency with mandatory areas for support under SESIL;
- high relevance to need in the region; and
- complementarity with existing efforts.

Core and non-core opportunities for DFID to add value are summarised below.

8.2 Formal education pathway initiatives

Pre-primary initiatives: complementing and scaling UNICEF, Save the Children, BRAC and GOU efforts

Core: Currently, there are large gaps in interventions to scale up support and sustain existing
efforts by UNICEF and other civil society partners providing pre-primary and ECD programming
in Karamoja. Training ECD teachers and caregivers in existing facilities supported by the
government and communities and providing teaching and learning materials to these centres
are two large gaps in programming that can be supported to improve service delivery for preprimary initiatives in Karamoja. DFID's investment would complement other efforts, resulting in
shared funding and pooling of resource.

Early grade reading initiatives in primary school: complementing and scaling USAID and GOU efforts

- Core: Support to teacher training and professional development under the SHRP/GPE programmes to ensure the appropriate uptake and scale of these programmes and to ensure they are implemented effectively in the region is critical to raise literacy scores and outcomes for pupils participating in the programme. DFID's investment would complement USAID's efforts, resulting in shared funding to extend teacher training efforts for early grade reading.
- 2. Core: Support to materials provision and replacement under the SHRP/GPE early grade reading programmes over the next 5–10 years is important, as it is likely there will be a significant loss of teacher's guides and student books due to poor storage and maintenance of materials at school level. DFID's investment would require significant resources to implement, as the costs of book production are high. However, the opportunity costs lost if the national early grade reading programme stops due to lack of materials in classrooms are much higher than the costs of replacing materials that have reached the end of their shelf life.
- 3. Core: If the number of schools in Karamoja's districts increases, roll-out of the early grade reading programme to additional schools and teachers will be required, inclusive of materials provision, teacher training and support. When the current SHRP and GPE programmes come to an end, moreover, there will be control schools in SHRP and GPE districts that will require scale-up of the model to their teachers and pupils. This effort could be covered by DFID under its support to existing early grade reading initiatives. This will require a heavy cost investment by DFID, as it comes with the full package of interventions necessary to scale the programme. However, if there are some schools that do not benefit from the programme at all, the overall loss of educational outcomes for students in those schools will be far greater over a generation than the cost of investing to scale the programme to the schools and students who deserve to receive it.
- 4. Non-Core: Currently, Abim and Amudat are not covered under the early grade reading programme as their communities do not speak Ngakarimojong. While it is clear they deserve to benefit from a literacy intervention, how this is conducted should be carefully considered. The Pokot language, spoken in Amudat (with some modifications to the orthography and after gaining community consensus on it), will be adequate for the preparation of early grade reading materials, according to a Language Readiness Report commissioned at the start of the SHRP programme (SIL, 2012). The Lebthur language, spoken in Abim, is classified as a developing language and requires a more significant development of its orthography in order for materials to be written in the language. Developing a national curriculum in either of these languages will require a significant investment of both time, expertise and human and financial resources, as it must start with an orthography review and development, followed by the writing of materials from for Primary 1–4. This process took nearly four years and large teams of language and literacy experts to execute under SHRP, and would be no different under SESIL. While it is important for all of Karamoja to benefit from an early grade reading programme, whether and

how DFID chooses to support this should be deeply discussed prior to execution, especially in regard to the costs of this initiative. One possible intervention that might mitigate this challenge at a lesser cost is listed in the fifth option below.

5. *Core:* One of the missing links in the SHRP programme is access to additional reading books in local languages to expand the reading culture and increase access to materials for early readers. It is possible to expand access to additional reading materials in Ngakarimojong through supplementary levelled readers (e.g. reading books that are organised in levels of difficulty from easy books for emergent readers to longer, more complex books for advanced readers). The orthographies of the Pokot and Lebthur languages can also be developed with language boards and communities and then used to create levelled readers for use in schools. This would not only expand access to key instructional materials at a much reduced cost (in comparison to the costs of developing a full curriculum in both languages), but also build classroom libraries that can be leveraged to engage parents and communities in creating and sustaining a broader reading culture in the region-something that is key to reducing illiteracy levels in Karamoja and better involving families in education. It would also allow communities and children in Abim and Amudat to access and participate in a national reading programme in a more manageable (and time and cost-effective) way. Teachers and schools in these two districts would require training to use the materials, but that would be a much less intensive human and financial investment in teacher skilling than is required under the current SHRP and GPE programmes.

Early grade numeracy initiatives in primary school: closing gaps in GOU efforts

1. Non-Core: Presently, there is no national numeracy programme in Uganda, despite plenty of evidence pointing to gaps in numeracy skills in pupils from primary to secondary. One possible intervention for DFID to close learning gaps in numeracy includes designing, piloting and rolling out an Early Grade Numeracy programme in all districts of Karamoja. Existing models from other partners in Uganda, like the Aga Khan Foundation or RTI's Tusome Programme in Kenya, can be adopted and applied to reduce the transaction costs and time required to develop a full programme from scratch. This intervention would like come at a high cost for DFID, regardless of the process for curriculum development, as any existing materials would require modification and alignment to the national curriculum along with materials production and teacher training and support supervision.

Primary infrastructure and supply initiatives: closing gaps in GOU, Irish Aid and UNICEF efforts

- Core: Infrastructure and facilities for schools, including classroom blocks, latrines, instructional
 materials (textbooks and teaching aids), school furniture and staff accommodation (especially
 in remote locations to reduce staff attrition) are critically needed to expand education access
 and ensure there are enough schools to meet the needs of the current and future school-going
 population over the next five to ten years. Infrastructure investments are costly and require
 heavy inputs, though they are critical as the demand for education in the region expands.
- 2. *Core:* Expanding access to boarding opportunities for children in primary school, especially girls, has been identified as a key intervention to close enrolment gaps and improve school retention and completion. Supporting infrastructure development in this area might prove key to improving education enrolment and completion targets for Karamojong children. This initiative might prove more cost-effective than the construction of complete schools in the region and provide a basis for ensuring students access existing schools in higher numbers.
- 3. *Core:* Providing menstrual hygiene management supplies to schools—or training them to make reusable menstrual pads using locally available materials—will help close some of the gaps in completion and retention in upper primary and secondary for girls, and can be achieved with

minimal cost and investment, requiring only training for the programme to be implemented (SNV, 2015).

Primary teacher training and monitoring initiatives: closing gaps in USAID, GPE, UNICEF and GOU efforts

- 1. Core: Teacher training and professional development investments are critical to ensuring children access a quality education in Karamoja. These can start from the regional PTCs in Karamoja for new teachers and be rolled out though in-service teacher education and training for teachers already in the system. Ensuring the success of early literacy programming and the overall implementation of the national curriculum in primary and secondary schools can be better achieved with initial investments in teacher training and ongoing investments in teacher support and supervision. The costs for this will vary across districts and will be different for inservice versus pre-service initiatives. Residential training always comes at a high cost, but is critical to improve the quality of teaching and learning in schools.
- 2. Core: Teacher monitoring and support supervision by Coordinating Centre Tutors, district education officials, and head teachers is critical to ensuring the uptake and sustainability of new programming and improving the quality of teaching and learning. Improving the district and coordinating centre monitoring process and its adequate funding will not only ensure teachers are supported in their classrooms, but also that education officials are held accountable for delivering on their mandates. The costs for this initiative are far lower than the costs of teacher training and professional development, and provide a necessary support function to improve the monitoring of teaching and learning in schools. Given gaps in funding this intervention from other donors and partners, it is likely to be an important investment for DFID to consider.
- 3. *Core:* Given DFID's place in the education space in Uganda, lobbying government for an improved teacher support system beyond training and basic monitoring to include better—and more decentralised—recruitment, retention, motivation, school leadership and professional growth incentives might provide a stronger and more sustainable approach to teacher skilling in Karamoja. This could prove key in closing staffing and capacity gaps and ensure more Karamojong teachers are recruited into the profession. This investment will require financing of workshops and meetings, as well as financing to various departments in the MOES to execute the initiative.
- 4. *Core:* Collaboration with UNICEF to implement the enhanced whole school model across districts in Karamoja will go far towards ensuring the uptake of meaningful and quality education in the region. Strong focus on supporting district education staff, tutors, head teachers and teachers will ensure the whole school model is correctly adopted in schools and provide a level of sustainability for the initiative. Costs for this initiative will be on a per school basis and support training and material provision, which will increase depending on the number of schools targeted.

Secondary school access initiatives: complementing and scaling Irish Aid and GOU efforts

Core: Through the secondary school Public Private Partnership model under SESIL, it is
possible to reduce access barriers in the coming phase by leveraging interventions like
Promoting Equality in African Schools (PEAS) institutions for Karamoja, which reduce or
eliminate fees. This can be explored under SESIL and rolled out through PEAS as an
implementing partner. This would ensure DFID compliments initiatives like the Irish Aid bursary
programme without directly supporting a student sponsorship scheme. Finances have already
been earmarked to PEAS under the SESIL and will come at no additional cost to DFID.

8.3 Non-formal education pathway initiatives

Non-formal initiatives: complementing and scaling ABEK, accelerated learning programming, youth skilling and GOU efforts

- 1. Core: Working with district education officials and Save the Children to revise the ABEK programme to respond to current needs, including introducing new policies and curricula that align to current efforts and national developments, especially in the areas of early literacy and numeracy, might be critical to ensuring children in Karamoja still access non-formal education programming in the region. Ensuring funding for the ABEK programme though government budgets is also key to the sustainability and long-term success of the programme and its recognition as a key education initiative for Karamoja. Investing in this initiative requires a long-term strategy to ensure that government is able to incorporate costs for maintaining the programme within its own budgets over time.
- 2. Core: Other options for expanding non-formal programming for children and youths through accelerated learning programmes that condense primary school education from seven to three or four years should also be explored for Karamoja as an alternative to the ABEK model. Similar programming has been introduced in other areas of Uganda affected by conflict or displacement with success (e.g. Save's Child-Centred Alternative for Non-formal Community Based Education programme in refugee communities in western Uganda). Neighbouring countries like South Sudan have also utilised similar approaches to close gaps in education access and completion for pastoralist communities and communities living in fragility as part of its national education policy. The costs of establishing a new programme like this in Karamoja would be high, although such an intervention will help close gaps in the ABEK programme and offer a new mode of non-formal education for children in the region.
- 3. Non-Core: Youth skilling programming is high on the non-formal agenda in Karamoja for youths who cannot access formal education or continue with their studies after leaving primary school. It is only, however, implemented by a handful of partners, and only in some districts in the region. It is possible to support scale-up of programming through partners like Restless Development or VSO, who have been implementing initiatives aimed at closing gaps in skilling initiatives for the past years. This will come at a cheaper cost than investing in BTVET initiatives, and will help to close gaps in education for youths and adults who missed out on schooling when they were young. Educating these individuals will also help ensure better health and education outcomes for their children, reducing education and development gaps for future generations.

8.4 Community and government initiatives

Community education awareness and engagement initiatives: complementing and scaling out-of-school children initiatives and education advocacy

- 1. Non-Core: Programming delivering education sensitisation and mobilisation is key to ensuring communities adopt a positive approach to education and that households enrol their children in school. Initiatives must engage with communities and parents to adopt a persistent positive attitude of letting children enrol, attend and complete primary education and help them to fulfil their roles and responsibilities. Programming like World Vision's out-of-school children initiative provides vehicles for this that can be further modified and scaled through other partners across the sub-region. Costs for such initiatives are often less than school-specific interventions, as they can be delivered through mass media and other community campaigns to reach large numbers with limited overall financing.
- 2. *Core:* Through initiatives like UWEZO's community-based learning assessment, parents can be engaged in understanding the processes and results of their children's acquisition of key skills.

It is possible to expand UWEZO's model to additional communities and schools and use it to ensure appropriate records are kept of progress and that results are shared with parents to help them better engage in their children's learning. As SESIL is already supporting UWEZO, this investment will not come at an additional cost to DFID.

3. *Non-Core:* Initiatives like conditional cash transfers to families that send their girls to school have been successful in other countries to close gender gaps in education and ensure girls benefit from learning. These options could be explored with development partners as one means of improving girls' access to and retention in school. Costs for this initiative will vary with the type and amount of cash transferred under such a programme, which will also vary widely based on size and scope.

Government coordination initiatives: closing gaps in GOU efforts

- 1. Core: Strengthening engagement between the MOES and District Education Offices to address persistent inadequate staffing and capacity constraints in the sector and enhance coordination and collaboration in implementation of ongoing programmes and projects for better results is key to mitigating the current fragmentation of efforts and a lack of communication between national, regional and district levels of government. DFID can add value to this process by supporting national, regional and district fora geared towards joint sharing, planning and budgeting to close gaps and ensure an equitable distribution of resources across the sub-region for education programming. This investment comes at a manageable cost for DFID with a high rate of return.
- 2. *Core:* Improving data collection and sharing efforts from schools to districts and from districts to the ministry will greatly improve the quality of evidence-based decision-making and ensure services are allocated to the districts and schools that need them most. DFID can add value to this process by supporting improved data collection and management initiatives at district level throughout the region. Financial investments in this will come at a high cost for DFID, although data sharing and the routine collection of information is extremely important to improving service delivery and the allocation of education services based on need in the region.
- 3. Core: Promoting affirmative action measures in local PTCs to lower enrolment requirements and allow less qualified individuals from Karamoja to become teachers in local schools is a possible means of closing gaps in the supply of locally available Karamojong teachers. This will come at little cost to DFID, as it involves lobbying and engagement with government rather than intensive financial investment.
- 4. Core: The unique sociocultural and political context of Karamoja demands special interventions and areas of focus for education access, quality and equity to improve. DFID can leverage its efforts to support the MOES to create a special education plan for Karamoja that takes into account the formal and non-formal education needs of the sector and responds to the particular challenges the region faces in closing gaps in targets and achievements for education. Like the suggestion above, this will come at little cost to DFID.
- 5. *Non-Core:* School feeding emerged as a key initiative spurring school enrolment and attendance in Karamoja. However, it is costly and unsustainable at best. Working with government, donors and other development partners on a longer-term strategy to sustain school feeding programmes is an area where DFID could add value, if not immediately than in the coming years. An investment in strategy development comes at little cost to DFID, while investing in funding school feeding programming comes at a much higher rate.

Overall, in view of the challenges and constraints to education access, quality and equity in Karamoja over the next five to ten years, there is a need to expand diverse and flexible options for contextualised, cultural-specific and relevant schooling and learning in Karamoja. Like the challenges faced by the region, initiatives will likely be multifaceted and complex, involving cross sectoral commitments and engagement to be successful and sustainable within community and government systems. There is also a need for government to develop specific and needs-based resource allocation formulas to bring about greater equity in Karamoja along regional, gender and

socioeconomic divides. This involves finding ways to improve government expenditure on education and to reduce costs to households, as well as developing pro-poor public financing models to allow more children in Karamoja to access and complete their education. Introducing financial incentives to promote gender parity in education, for example an enhanced capitation grant offered for girls once a school attains or exceeds a recommended minimum level of enrolment, might also be an option.

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Annex A Education pathways analysis

Summary of formal education pathways

Pathway	Barriers to accessing and completing	Opportunities for accessing and completing	Suggested actions to reduce barriers and expand opportunities
Formal: nursery and primary schools	 low parental opinion of school; available nursery schools are far from communities; all are privately run and charging fees; inadequate numbers of trained caregivers who are unware of policies; lack of teaching and learning materials (play materials); parents do not know how to support; some communities have no schools at all; even if they want to send their children, there is no option to do so; some children are sent or sent irregularly due to livelihood/labour requirements; lack of sanitary facilities and other infrastructure: if it rains or it is too hot, children do not attend school; low socioeconomic status of parents prevents sending children to school: 	 key stakeholders: political and technical leadership are positive towards children accessing pre-primary; structures are in place from village to districts to national level, and there is room for them to play more of a role; availability of trained caregivers has improved; children are able to attend, and are willing to do so; laws like the Education Act have helped mobilise and sensitise communities; national ECD policy has underscored the importance of communities enrolling their children for ECD: good dissemination of policies through districts (still has to reach to last schools); learning framework in place has helped guide the roll-out of these policies; and some nursery schools in place and available. 	 coding of community schools; construction of additional schools and more infrastructure: there have been budget cuts in this area and it has limited our ability to expand service provision (like capital development funding for school construction). Access is still a big problem; safe water sources in communities or schools would reduce child labour for fetching water; making of reusable menstrual pads for older girls; strengthening support supervision of schools; mentoring and training of teachers in management and pedagogy, and engaging with parents and communities; establishing education committees at village, school and parish level to mobilise and encourage children to be

they cannot meet even the low fee requirements;

- boys are enrolled more than girls; if children are good with animals they are not sent to school;
- girls are sent to school under the age of 12, then are withdrawn to do other home chores, get married or to ensure they are not 'spoiled' by education;
- if parents do not feel their children are learning, they pull them from school; this is about teacher quality, preparation and presence/attendance; corporal punishment is sometimes a factor, as is alcoholism among teachers;
- parents lack confidence in some schools so they do not send their children: quality of education provided, safety of school environment, safety of access to school;
- when school meals are not provided, children are not sent to school;
- in primary school when girls reach a certain age, they are pulled out of school due to menstruation; female genital mutilation can also cause girls

in school, and to support enrolment, retention and completion;

- improving facilities and teaching and learning materials at existing schools to ensure provision of quality education;
- diversifying livelihoods/types of work and incomes at household level will also help expand students' opportunities to enrol and stay in school;
- community by-laws can be put in place to ensure children enrol in and complete school (and to reduce early marriage and female genital mutilation). This can also be used to reduce negative attitudes towards education;
- more sensitisation for communities on the value of education, and identify community ambassadors to support this process;
- better support of school governance: parent-teacher associations, school management committees, HTs and DHTs;
- training and support for children with special needs, including teaching materials—maybe to add one school

	 to leave school throughout primary, and this leads to early marriage; migration and mobile communities (Napak and Abim especially): returnees from camps due to peace has also caused migration to new places. They move to new areas without services for education, so children are pulled out of school; this includes health, education, social services. These communities live in grass thatched temporary houses; and Abim has seven parishes without a primary school; the coding of community schools has been delayed. 		 for children with special needs for the region; need for more teachers to serve the population: government to add more teachers; revised allocation procedures for UPE/USE for government grants in Karamoja—schools here rely almost 90% only on these grants per term (unlike other places where fees are regularly collected). Karamoja needs to receive more allocation as schools charge low fees and most parents do not pay, yet they remain open and serving students; and punishment to be put in place for early marriage and female genital mutilation: communities and parents to be held accountable.
Formal: secondary school S1–S6	 very few secondary schools in each district; most districts only have up to O level and one A level school; high school fees limit enrolment low staffing levels for science teachers: most science teachers are from Teso; low competency levels among trained teachers (especially for science); 	 scholarships are provided to some students; school feeding programmes to reduce costs (two meals per day); the number of qualified teachers has improved over the years; with funding schools could recruit more; 	 provide more scholarships; stronger career guidance and mentorship; establish secondary schools in sub- counties; provide teacher facilities to ensure posted teachers stay;

	 teachers are posted to schools and do not teach, but collect salaries anyway; science and computer labs are not furnished and materials are not provided; limited bursaries for students who qualify to attend school; and low staffing numbers overall in secondary schools. 	 parents support and contribute where they can; development plans and policies have helped expand access; development partners are there to support programming; more students are graduating from primary schools, meaning more can potentially enter secondary schools; local materials and labour are available to construct schools, including provision of land (as shown by the number of community schools in the region); board of Governors, parent-teacher associations as management structures have helped support existing schools; strong support/engagement between technical and political wings; and local radio stations have helped with mobilisation and advocacy through talk shows. 	 more equipment and supplies for practical courses like science; affirmative action by government to pay tuition allowance to urban/extremely rural school teachers, to ensure they remain and are provided for; and to ensure local teachers can be hired; decentralise the hiring of secondary school teachers in Karamoja to eliminate this problem; and decentralisation for monitoring and supervision (no costs for this in districts); but if they could be provided we can monitor schools (includes transport and transport costs).
Formal: BTVET, polytech	 lack of information and knowledge of these schools among the local population; some districts do not have schools at all; 	 expansion in access to BTVETs (though some districts are still lacking); provision of capitation grants and school feeding has helped some schools stay alive; 	 scholarships so more students can join; expand career guidance and mentorship;

	 some schools lack facilities for practical skills development; understaffing in schools with limited teachers for certain workshops; administrative staffing, mechanics, civil engineering, building and concrete practices, metal works; coursework limited or non-existent for new trades like motorbike repair, mobile phone repair, computers; not connected to national electricity grid; limited career guidance for what is on offer: many take up technical education as last resort; curriculum is outdated and irrelevant; limited role models for internships or mentorship; and low enrolment in schools; most students come from out of Karamoja. 	 government-led posting of tutors has improved; and new programmes like VSO/BTC are helping to revise coursework and add new courses, which can help to expand opportunities for more students to get a more relevant education; new infrastructure and equipment. 	 recruit more staff to ensure more courses are offered; provision of adequate materials and supplies; completing incomplete structures in existing schools (construction grants); and expand course offerings and types to attract more students.
Formal: PTC and nurse training college	 entry requirements for science teachers are high; negative attitude towards the profession in general; 	 there are two PTCs and one nursing school, which is high for a region in Uganda; there are students who can enter training programmes; 	 increase in scholarships/partners supporting this type of education; affirmative action for Karamoja: allow districts here to make recommendations about who is placed in PTC or nurse training schools; and

 costs have increased: government does not provide all costs (hidden costs have grown); inadequate numbers of tutors; limited facilities; and males have hard time accessing nursing school (more girls taken in). 	 most schools have some level of staffing; capitation grants have been provided; and UNFPA support for midwives has allowed more to enrol. 	 attach nurse training schools to the main hospitals, rather than standalone schools.
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Summary of non-formal education pathways

Pathway	Barriers to accessing and completing	Opportunities for accessing and completing	Suggested actions to reduce barriers and expand opportunities
Non-formal: community and home-based ECD	 limited community knowledge and understanding; lack of trained caregivers (not paid, lack training, some illiterate themselves): limits implementation of early learning frameworks; no government or limited partner funding for ECD materials; no support for school inspection and monitoring of these centres; limited facilities and supplies, especially water, sanitation and hygiene; and ECD centres are mistaken for feeding centres. 	 policies and learning frameworks are in place; some development partners are supporting this in particular; development plans include the need for this, but it is an unfunded priority; plenty of children could attend: they are there; communities have built structures where they do not exist; and some primary schools have offered ECD centres attached. 	 government to prioritise this better, and support payment of teachers and construction of centres; register and identify these caregivers and streamline it with the existing policies; put a model ECD centre in each district for others to learn from; put in place a caregivers ECD training centre, or add it to the PTCs; and expand learning through play approaches and materials in ECD centres.

Non-formal:

ABEK

- poorly trained ABEK teachers; high rates of absenteeism; poor time management;
- mixing of students in levels as only one teacher available, which means children are not learning what they should;
- ABEK only in some parishes;
- no certification and grading of teachers, and no training and certification of teachers;
- limited facilities and most open air: lack of furniture in centres;
- limited supplies and resources, especially teaching manuals;
- no feeding in many centres;
- mobility of communities has limited provision of ABEK in many places (Amudat, Nakapiripirit);
- movement of supplies a problem;
- outdated curriculum;
- some parents still not sending children because of need to earn livelihood; and
- reduction in partner support and districts lack funding to support.

- ABEK is important to fight negative attitudes towards education in communities;
- ABEK programme can be made more meaningful by revising the curriculum;
- the non-formal education policy is in place and it is important here in Karamoja. In places where there are no schools, ABEK is an important offering;
- ABEK has improved enrolment in formal schools;
- ABEK is still very relevant here, but it is entirely dependent on partners. What would it look like to have government support for it?;
- helps give some functional skills to learners who attend;
- some teachers have been credited and supported to receive payment; and
- children are covering fewer modules now, so they have to enter primary school at a lower level.

- Amudat and Nakapiripirit still need mobile centres: communities are still moving and need to have mobile ABEK;
- development partners and government should work together to keep providing support, as service provision is critical to communities; and
- streamline ABEK into the government system so that there is better transition, funding and management of these programmes (the UPE support promised has not materialised in the form of grants and recognition).

Non-formal: skilling programming

- low awareness or limited awareness of the value of skilling programming among potential students and communities;
- there is a bigger need for this than what is provided: not all locations and districts are covered;
- students have trouble accessing markets after getting skills;
- many are not providing basic functional skills in addition to technical skills: entrepreneurship, financial literacy, functional literacy and numeracy are missing; and
- courses need to be expanded to meet current market needs, e.g. livestock, piggery and poultry, bakeries.

- some organisations have supported skilling programmes for carpentry, mechanics, repairs, tailoring and given start-up equipment (BRAC, C&D, VSO—this has been important for helping dropouts who cannot access, also children with special needs); and
- private sector institutions have also provided some of these skilling programming (including some alternative models).

- outreach from BTVETs to organise communities and groups;
- popularise these programme types to make people aware of what is on offer; and
- expansion of this for youths is important, as many cannot access formal education programming but are in need of livelihood skills development to stay out of poverty.