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Review

Pastoral education: The missing link in Uganda education system

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Pastoralism is a production system closely linked with cultural identity that relies on raising livestock on pastures. Studies indicate that over 30 million people in the Great Horn of Africa (Somalia, Ethiopia, Kenya, South Sudan, Eritrea, Djibouti, Sudan, Tanzania and Uganda) practice pastoralism and agropastoralism as a major source of livelihoods. Livestock are their social, cultural, spiritual and economic assets providing food and income for the family within and between generations. Yet this important production system of livelihood as well as socialisation mechanism is missing in the school or university curriculum of these countries including Uganda. With the exception of Tanzania and Ethiopia that have recently designed a curriculum on pastoral studies in their university curriculum, pastoral education has been missing in the school and University curriculum of the Great Horn of Africa school systems yet most of these countries livelihoods depend on pastoralism. From the socialisation perspective, the dynamism surrounding the livelihoods of these communities and/ or families impedes peace in society. Families as social units play very important role of socialisation and recreation therefore, making pastoral education an important element not only from an African traditional context but also from the sociological perspectives. The sense and complex nature of communities and households struggling to improve on their own survival and development through the practice of pastoralism are complex yet central to the maintenance of peace and stability of the communities. The inclusion of pastoral education to the school and university curriculum as a common or cross cutting course unit would introduce undergraduate and postgraduate students to the fascinating and rich world of pastoralism. This would provide the students with knowledge and skills to analyse and understand pastoral systems as they exist today, and the options for their future development in support of national economic growth in a changing world. The curriculum would also help students from different backgrounds to understand how pastoralism functions as a system, its contributions to local, national and global economies and sustainable environmental management, and its role in promoting peace, socialisation, and harmony between pastoral and other communities.

Key words: Pastoralism, pastoral education, livestock.

INTRODUCTION

developing capacity and creating opportunities for the communities that practice it. Many of the institutional, economic, social and ecological problems of Africa drylands are to some degree associated with ineffective knowledge on pastoralism management Tilstone et al., 2013). These regions have suffered decades of neglect, political marginalization and the undermining of indigenous knowledge and traditional mechanisms of self-organization, along with a lack of appropriate education, information provision and capacity-building support (FAO, 2018). Policy makers and practitioners have often based their interventions on a series of myths and misconceptions, due to a lack of local understanding regarding dryland livelihoods and ecosystems and how to work with the associated knowledge (IIED, 2013). Misperceptions that mobile livestock keeping is backward rather than resilient, that the drylands are wastelands and that herd management methods are illogical, have all led to ineffective and often damaging potential sustainable development. These myths continue today with the implementation of interventions that ignore the integrity of the dryland socio-ecological system and continue to advocate for converting rich water-resource areas to crop production, without understanding the subsequent implications on pastoral systems (Tilstone et al., 2013:2; Elhadary, 2014).

The assumption and the desire for "one size fits all" have led the pastoral communities to lack access to education, information and capacities to access and use external knowledge (Tsegaye, 2013, Aikman and El Haj, 2006). Despite this, there is evidence that they are extremely adept at using their own existing local resources, social networks and organizations, for generating and passing information through scouting, collecting information on rangeland condition and adapting to new opportunities by extensive use of their conservative ways of passing information (Asal, 2012). In scholars have not moved enough contextualising theoretical propositions of the classical or generic forms of knowledge from the Western viewpoint. Most students in Africa leave schooling with theory that is largely not utilised to benefit their particular educational needs and challenges (UNESCO: Report on the State of Education in Africa). Further to this, in some African universities, apart from education in agriculture, the other foundations of education in pastoral studies have for the past decades, been side-lined and is one of such peripherally handled within agriculture as a discipline.

The objective of this study aims to examine the past and the present Uganda education system and policy that have continuously continued to side-lined the inclusion of pastoralism into the school/university curricular. The discusses the process of mainstreaming pastoralism in the University curriculum, and assesses the subsequent approaches that have been undertaken with minimal consideration to operationalise pastoralism into the Uganda education system. This probably explains why in Uganda and elsewhere the pastoral communities around the world are often marginal people in the nation-states which they inhabit. In East Africa alone, there are several examples of pastoral communities who have historically been viewed as difficult to administer, such as the Turkana of Kenya, the Nuer and Dinka of south Sudan, the Somali of Somalia, the Nyangatom of Ethiopia and Sudan and the Karimojong of Uganda. Policies dealing with the pastoral communities are often guided by mistaken assumptions about pastoralism and pastoralists which lead to interventions ill-fitting to the realities on the ground. The assumption that pastoralism is often associated with violence, and that pastoralists are inherently conservative and unwilling to change their ways are all ill misconceptions (Kandagor, 2005). The interventions based on these assumptions risk ending up working against the livelihood strategies of these people, leaving them with poorer options for survival and well-being (Galaty, 2002).

In schools or universities, Uganda has never designed any clear curriculum on pastoralism as a subject or a course unit even during the colonial administration. At the beginning of the education system in Uganda, the colonial authorities regarded pastoralism system as prone to insecurity. The clan and community were believed, to have no incentive to invest in the land, while individuals with initiative and means lacked incentives to make improvements because of inadequate security provided to them. Though it is said the colonial government in Uganda was a protectorate and ruled indirectly, rather than as a colony or territory, its policies towards the indigenous pastoralism system were far from indirect. The 1955 recommendation by the East African Royal Commission, which Uganda pursued on land tenure policy that seeks the individualisation of land ownership, has had far reaching effects on pastoralism and the pattern of rangeland management. Land tenure policies in Uganda have been following the individual owner model especially in the area of crop cultivation where the impact of investment is easily noticed; this is because of the state's view that rangeland has no economic benefit and that pastoralism is unproductive (Kisamba-Mugerwa, 1992: x).

Since earlier studies had been conducted with a focus

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on agricultural development and farm land tenure in predominantly crop farming system areas, it became pertinent for this study to first examine pastoralism as an embedded subject or topic within the agricultural domain and secondly as an important aspect in itself. The overall purpose of the study is to review and establish the general state of pastoralism in the Uganda education system. Specifically, the study sets to examine where and why the curriculum is situated, what it is and how it might be applied, particularly with a view to enhance resilience in the Horn of Africa. This is not a comprehensive review, but nonetheless will provide a means to be considered as a definitive process to developing a curriculum on pastoral studies into schools and other tertiary education set up. This would be considered as a stand-alone subject or as a course unit that can cut across the other university programs in order to provide adequate knowledge on the subject. The study also aims at identifying areas that may need investigations and revisions to promote knowledge on pastoralism in Uganda, particularly for appropriate technological and policy interventions for sustainable resource management and integrated resource conservation.

Universities in Uganda have operationalised agriculture curriculum by using different, dynamic and multi-faceted approaches. Many offer agriculture as a core course and a stand-alone degree while other institutions offer it as a short term training programme. Agriculture programmes in Uganda Universities have been implemented for many decades because it is viewed as one of the major strategies for the economic growth of the country. In essence and based on this, the study seeks to analyse also the trajectory behind side-lining pastoralism within the agricultural courses, in fact very little attention has been given to pastoralism in this context. The study posits that if pastoral studies would be offered as a standalone module by the different Universities this would ultimately and cumulatively present the opportunity to promoting conditions of sustainable development for the communities that practice pastoralism in Uganda and elsewhere in Africa.

As a source of information, the researcher sampled and used two organisations to collect the information for the report. The two organisations were: National Curriculum Development Centre (NCDC) and the National Council for Higher Education that develop and approve the school and the University curricular respectively. The researcher also made some spot observations while meeting and discussing with experts in agriculture where pastoralism is placed. In the Government White Paper (1992:173) it clearly indicates that Karamoja Region where pastoralism is practiced has been accorded a special status, and Government of Uganda (GoU) has put in place some strategies to respond to the problems prevailing in this region, including education, in a broader context the

integrated development effort. This therefore, clearly shows that pastoralism is viewed as a problem.

Pastoralism is not only practiced in Karamoja region, there are many other communities in Uganda that still depend on pastoralism as a way of livelihood yet knowledge about pastoralism is inadequate. These communities are dynamic and fluid and respond to changes that are taking place in their social, economic, political and physical environment (IIED, 2013). A number of forces currently are affecting these communities causing changes, while others are able to benefit, others are losing out. These changes include among others government recognition of agriculture where pastoralism is hidden, increasing wealth concentration, increasing education, new technology, tourism, conversion of rangeland to other uses, and income diversification (ODI, 2009).

During the colonial administration in Uganda, between 1911 and 1950, some of the pastoral lands were closed and referred to as 'special areas' or 'human zoo'! According to Cisternino (1979), it required one to get a parsimoniously issued permit to enter. These areas included Karamoja region. They were intentionally isolated from the rest of Uganda and left completely out of the entire process of modernization and education provision and development, which the rest of the country enjoyed. By 1999, the OAU/USAID Report 1999 reported that the pastoral population in the world was 50 million, while Ethiopia, Eritrea, Sudan, Djibouti, Kenya and Uganda supported around 20 million.

There are different types of pastoralism resulting from varying characteristics of rangelands coupled with socio-economic, sociological and technological influences. Pastoralism includes nomads, transhumance, and agro-pastoralism. With all the troubles and disappointment to bureaucrats and planners in Uganda, the pastoralists have not been left alone since their colonisation at the turn of the century, and it seems they will not be allowed simply to work out their own destiny in the future. Too much capital, time and administrative energy have been invested by governments that have ruled Uganda to disband pastoralism but in vain. Pastoralism is seen as a challenge by the agrarian community, and a blemish on the face of the new Ugandan nation.

Pastoral communities are becoming significant and expanding daily in several parts of Uganda. The current restocking programmes taking place in the districts of Uganda are evidence that more people are beginning to adopt pastoralism both as a way of life and a mode of production. So, pastoralism has come to stay. Therefore, the problem of Pastoralism as a subject of study will not go away soon and is now one of the major challenges for education provision today (Dyer, 2006). In fact, the overall education policy in Uganda seems to condemn pastoralism at many levels in their principles, and goals; in their explanatory paradigms; in their approaches and

methodologies; and in their implementation (Davies, 2017; DIIS, 2015).

PASTORAL EDUCATION: A CONCEPTUAL FRAMEWORK

To understand the concept of pastoralism, it is important to start with the conceptualisation of education. A robust literature exists that defines education. Paulo Freire, whose work in the 1980s focussed on pedagogy and learning in Latin America, defines education as the processing of experience, particularly critical reflection of experience, which allows for learning to move into application to life and action (Freire, 2006). Recognising education both as a right and an imperative for societal advancement, Joseph Stiglitz takes this argument further, positing that knowledge is a public good and that restricting knowledge leads to inefficiency and a slower pace in innovation (Stiglitz, 2006:123).

Education, particularly tertiary level education, has been known not only to impart skills to learners, but also as a vehicle for social transformation and social justice (Vongalis-Macrow, 2006). At the individual level, recipients of education benefit severally, for example by gaining a range of social, linguistic and inter-cultural management skills, in addition to increasing networks, collaborative activities and mutual learning. Specifically, Tierney views education as empowering individuals to play a role towards enhancing public welfare in society (2009:134).

Paying attention to the role of higher education, Ghani and Lockhart conclude that higher education imparts skills which will nurture citizens to support the development of the economy and polity (2008: 89), while Castells views universities as fundamental tools of development which facilitate innovation in society through mechanisms such as technology transfer and economic development (Castells, 1994:15). He further discusses how universities in particular have always been mechanisms of selection of dominant elites, including in such mechanisms, beyond selection in the strict sense, the socialisation process of these elites, the formation of the networks for their cohesion, and the establishment of codes of distinction between these elites and the rest of society (Ibid, 1994:26). That is why Freire emphasised the education should play a role not only in developing and nurturing a questioning attitude towards the violence of the status quo, but also in presenting alternatives to that violence (2006). For this questioning attitude to be fully nurtured. Freire underlines that there is need for a democratic space between learners and educators (Freire, 2006:116-117). Education indeed is an imperative for societal advancement (Dyer, 2016).

The Uganda education system has not been an exceptional to this observation. There have been systematic indigenous education methods of imparting

knowledge before even the missionaries came to Uganda (Krätli, 2009). The colonial and post-colonial efforts and independence governments, together with development agencies and non-government organisations (NGOs), have invested substantial monetary resources on improve education with the efforts on agricultural/rangeland productivity but without commensurate success in pastoralism for sustainable development (Kisamba-Mugerwa, 1992:1). With the population growth and the increasing levels of environmental awareness, education still plays a very important role on issues of sustainable resource use of the livestock especially, food security, and social stability that have become central to Ugandan national development programmes.

RATIONALE AND JUSTIFICATION

It is evident that pastoralism as a field of study in the provision of education at all levels in Uganda is undermined thereby creating a social consciousness with values, norms, knowledge and skills, which have a complex and dynamic relationship among those who practice pastoralism as a mode of production and livelihood (Krätli, 2001). The author is compelled to write this book because of the brunt of injustices of the education system and policies in Uganda that frowns at pastoralism and gives it little attention. This study is expected to provide an initial guidance to education planners and providers in Uganda and to bench mark on inclusion of pastoralism as a substantive field of study at all levels or the education cycles. This will form an initial body of information that will guide government, Non-Governmental Organisations and other partners in the education provision in Uganda in formulating relevant education policies on pastoralism, designing and developing pastoralism as a field of study at all levels of education provision, and subsequently improving on the planning and management functions of the subject.

EVOLUTION AND CONTEXT OF EDUCATION IN UGANDA

The indigenous education

Before the introduction of Western education in Uganda by the Christian missionaries in 1880s, there existed a systematic indigenous educational method of imparting knowledge and skills to the younger generation. The indigenous type of education helped each society not only in Uganda but the whole of Africa to pass their educational values to the younger men and women. This education played a major role in transmitting the general and the life skills to the younger ones to ensure the

survival of the humanity within their vicinity. The transmission of skills started right from the day one is born until he/she dies (Castle, 1965). Every ethnic group had their own educational system with aims, organizations, contents, methods of teaching and places where education was imparted.

During this time one fundamental learning place among the Uganda society was within the homestead. In these homestead classes were conducted in various places for example around a fireplace at night. In the homestead boys were to light fire in one central place in a homestead where elders sat together warming themselves with fire as they fought off the cold of the evening. As they sat together in this place elders taught the young ones the skills that were necessary for their survivals. Classes were also conducted in houses by both elderly women and men concerning the ongoing activity within the house itself. If cooking was going on then, the elderly women taught the young women how to cook or care for the house. If the construction of the house or store was going on the men were taught the art of construction there (Okello, 2014:4).

For the pastoralists, work depended on the expertise of all family members, usually divided by gender and age. Support within the family and between families was vital to ensure pastoralists can maximize on their needs and spread any risks. It is impossible to consider the pastoral family without considering the wider social and economic institutions within which they live. The family provides the labor, technical knowledge, marketing expertise and social networks that allow the system to function. Different members of the family contribute in different ways. For example, women were experts in marketing cattle milk and small stock as well as being experts in animal healthcare, monitoring the growth and health of calves and their mothers, deciding how much cattle milk to take for the family and informing decisions when the family needs to move, based on the quality and quantity of milk being produced. Negotiations among clan leaders (older men) were implemented and influenced by the social and economic networks established by younger men who are herding and taking livestock to the markets (Hesse et al., 2015: 27).

Other teaching and learning also took place in places where people carried out social, economic and political activities. For the technical skills like the blacksmiths it had designated areas, especially within the homestead for classes and place of work where they impart their knowledge to the younger generations. Such areas were mainly out of bounds to idlers. They enforced taboos (regulations) to scare off the idlers and some other intruders who would want to copy the technology and use for their own advantage. The African indigenous educational system covered all subjects that learners needed ranging from Science, Geography, history and Technology. An African man or woman at the age of

about 20 years knew all the basic knowledge about his or her surroundings. He or she knew zoology and Botany by mastering names of all plants and animals in the surrounding. They knew their early history and geography (Okello, 2014:5).

The formal and the tertiary education

Formal education was first initiated by voluntary Missionary Organisations when they arrived in Uganda around the period of 1880s. Government of Uganda (GoU) then started playing an active role by 1920s by exercising control over education, which was expanded rapidly during the 1950s and 1960s. In the 1920s and 1930s, the missionaries made education only available to a small group of people mainly children of the aristocracy, clergy and tribal chiefs.

The Government involvement in formal education began in the colonial period following a report in 1924 by the Phelps-Stokes Fund. Prior to that report formal education was entirely in the hands of missionary organisations. Government had neither set up any school, nor considered to take over the education monopolized by the missionaries for two reasons; Education of the natives was expensive and since the missionaries were kind and holy people willing to foot the costs, there was need for Government to relax and only give the missionaries tax rebate. Secondly, the missionaries never wanted government to take over education at first; they feared that Government would make education secular. Bishop Willis objected to an attempt by government to take over schools. He asserted that; to make education compulsory would be to invite Government to set up secular system (Phelps-Stokes Fund Report, 1925). The position of government participation in education was enhanced when Phelpsstrokes fund, a philanthropic organization whose interest was the education of Africans showed an interest in conducting research in Africa. The British colonial government gave them an upper hand of support in her colonies in Africa.

The interest of the Phelps-Stroke Commission (1924-1925) in Africa was an opportunity for the colonists who had no clear policy on education in Uganda. The colonial government gave support to Phelps-Stokes fund to sponsor a special commission to study and make recommendations on the type of education suitable for Africans. When the Phelps - Stokes Commission visited Uganda in 1924, there were six types of schools. These were:

a) Subgrade (equivalent to Primary 2). This was of uncertain educational value. Teachers were unqualified and unsupervised. It was intended largely to make pupils literate enough before baptism.

- b) Maternity schools to produce mid-wives.
- c) Central Schools (equivalent to Primary 4). They provided rudimentary education.
- d) High Schools (equivalent to primary 7). English was taught to all classes. Those for boys prepared them for the Colleges. Those for girls prepared them for being house wives and their curriculum was inferior to that of the boys.
- e) Normal schools. These were meant to produce teachers for High Schools.
- f) Colleges. These aimed at producing moral, upright and honest Christian clerks, traders, interpreters and chiefs. They were taught in English.

The Commission found out that the education offered in Uganda by the missionaries was too literary, the educational activities in the schools were not related to the community needs of the people and among the essential components missing from the curriculum were: agriculture where now pastoralism is embedded, health science, hygiene and care of children by the women. Little or no attention was given to the pastoralist from the onset of education in Uganda, the British protectorate government focused on isolating and pacifying the Karimojong instead. They saw little economic gain from region and concentrated on protecting administered neighbouring areas from Karimojong cattle raids. Subsequent governments following Ugandan independence similarly focused on security interventions while the provision of public goods and services lagged behind the rest of the country (Masebo, 2015).

The Government avoided owning schools because it lacked concrete ideas and policy about African Education, unlike the missionaries who had been in the field for long. Therefore, the school educational objectives and the curriculum continued to be determined by the missionaries. The anticipated agricultural and technical education was offered only by some schools. In addition, the attitude of most teachers, pupils and parents towards these activities were largely negative (Muyanda-Mutebi, 1996:4-6).

The recommendations of this commission changed the attitude of colonial Britain towards the education of the natives, not only in Uganda, but in the whole of Africa. The report criticized the type of education that the missionaries were giving to Africans. This report was not only damming to the missionaries, but it was an embarrassment to the colonial powers at Entebbe colonial office in Uganda. To them, the education was not conducive for adaptation of Africans to their way of life. They made recommendations, among which they emphasized the teaching of technology and handiwork, geography, science, history and music. This paved way for the government to take over the control of the education system in the country changing its development completely (Okello, 2014:19-20).

In its bid to improve on the education of the state,

government took over the direction of education in 1925. In the same year Government appointed Eric Hussey Director of Education to reorganize the education system in the country. The government came up with the education policies which favored the general development of education and technical education only in particular. In 1927, the education ordinance was enacted to guide the development of education in the country. In the ordinance, the Director of Education was empowered to reorganize the education system. It spelt out Government's powers and procedures in education. After the reorganization of the education system, technical and vocational education was to be taught to the Ugandan societies in four ways:

- 1. Through primary schools where village craft would have to be taught;
- 2. Through workshops on apprenticeship basis where learners would have a participatory learning guided by an experienced engineer or a technician;
- 3. Through special instruction workshop on production basis and:
- 4. Through properly instituted technical schools. (Ssekamwa, 1997.118).

This way government thought that the newly trained people would replace the imported labor from India. Government forthwith arranged technical and vocational education in such a way that some learners were to train through formal education. Department workshops were actually turned into technical schools. The workshops were affiliated to the departments of Lands, Surveys, Medical and Public Works to enable the training of the natives in these skills. These kinds of training institutions were only stopped in 1953, mainly because of the controversy that arose on the roles of formal technical institutions and these workshops. There was duplication in their work and to avoid this, the workshop schools had to come to an end (Ibid).

The de Bunsen Committee 1952

The development of education brought about by Sir Andrew Cohen is best seen through the de Bunsen Education Committee of 1952. During the year 1951 when Sir Andrew Cohen was appointed Governor of Uganda, the British government in London set up two education Commissions. One Commission was called the Jeffreys Education Commission for West Africa and the other one was called the Binns Study Group for East Africa and Central Africa that is Malawi, Zambia and Zimbabwe. At that time Britain felt that there was a need to improve the quality and quantity of education for Africans in these areas. Feelings had begun to advance that in the foreseeable future, these areas would eventually become independent of Britain. Therefore

there was a need to increase the number of educated men and women who would take up positions of responsibility when these countries would become independent. The Binns Study Group examined in 1951 the situation of education in Uganda and recommended major changes in the education system to improve both the quality and quantity of education in the country.

On the departure of the Binns Study Group, Sir Andrew Cohen appointed the de Bunsen Education Committee in 1952 to advise the government as to how to implement the suggestions of the Binns Study Group. Therefore the educational developments brought about by Sir Andrew Cohen are better seen through the recommendations of the de Bunsen Education Committee (Muyanda, 1996; Syngellakis and Arudo, 2006:5). The de Bunsen Committee looked into teacher education and the educational structure which were subsequently implemented as follows:

Teacher education

- i) The report said the training of teachers must be the basis of all educational development, a principle which the Protectorate Government had already recognized by initiating in advance of the report an interim scheme for the expansion of teacher training;
- ii) The improvement of the conditions and terms of service of teachers of all categories;
- iii) The expansion of secondary education in order to provide teachers for senior primary and secondary classes, Training College staffs, and men and women for the professions generally;
- iv) The expansion of facilities, both primary and secondary, for girls, which had seriously lagged behind facilities for boys;
- v) The extension of the full primary course from six to eight years, and the provision of a minimum of four years of education in all grant-aided schools;
- vi) The establishment of new primary schools.

Education structure

A new structure of education was established:

- i) The primary school course was to last 6 years with a final examination at the end.
- ii) A junior secondary section to last for 2 years, that is, Junior One and Junior Two. The schools in this section were divided up into two categories. One category was implicitly called academic section. Another section of schools was called practical. These were the Farm Schools, the Rural Trade Schools and the Home Craft Centres.
- iii) The Secondary School course 0-Level to last 4 years.

- iv) The Secondary School course A-Level to last 2 years. (This section had not been there before in the education system of Uganda).
- v) Makerere University College and other Universities abroad were established.
- vi) Teacher Training Colleges Grade II to be joined by candidates from Primary 6 or from Junior Two.
- vii) A Government Teacher Training College Grade III to be joined by candidates from Secondary 4. This college was first set up at Mbarara and then transferred to Kyambogo. Teachers trained in Grade II Teacher Training Colleges were to teach in Primary Schools. Teachers trained in the Grade III Teacher Training College were to teach in the two classes of the Junior Secondary section.
- viii) Technical Colleges for candidates from Junior Two.
- ix) Kampala Technical Institute for candidates from Technical Colleges. Graduates from this Kampala Technical Institute would proceed to the Royal Technical College in Nairobi since Makerere did not offer courses in technology. Kampala Technical Institute was at Nakawa and then it was later on transferred to Kyambogo as Uganda Polytechnic Institute (Muyanda, 1996; Odaet, 1990).

and limited functions The major that recommendations were apparently meant to serve were to provide a Ugandan cadre for the local colonial civil service especially at the lower levels. However, it did serve to construct a good foundation for an education system that was possible to build on the later and withstand difficult political and economic conditions (Syngellakis and Arudo, 2006:5). These recommendations shaped African education in Uganda independence. Before Uganda gained until independence in 1962, education and training Ugandans was geared to the limited chances that existed for employment in Government administration and in social services. With independence in 1962, came rapid changes, including the immediate availability of posts for Ugandans in Government employment and expansion of educational opportunities. Plans were made to prepare Ugandans to fill manpower gaps in commercial, managerial and technical fields in order to foster national development. The structure of education in Uganda was thus developed to cover both formal and informal education, though the system lays great emphasis on formal education from the primary level through the University (Odeat, 1990:1-3). A strong emphasis on the quality of education for all people was pointed out by the Castle commission (1963), which argued for raising standards of agriculture, and technical education, expansion of girls' education, and provision of adult education. Since 1963, education policy in Uganda was mainly guided by the Castle Commission report up to the inception of the 1992 Government White Paper (Syngellakis and Arudo, 2006:4)

The Castle Commission 1963

The demand for this commission was for high-level human power to take over the running and management of both the public and private sectors. Although the need for expanding primary education was recognised, it was felt that there were not enough resources for both primary-level and higher levels. A large proportion of the education budget then went to post-primary institutions. The practice of more resources going to post-primary institutions continued for more two decades. That situation persisted despite two attempts to promote universal primary education through the Third Five year Development Plan (1972-1976) and the Education Policy Review of 1977. The major constrain of achieving universal primary education was the negative political climate closely coupled with poor economic growth that characterised that period. The post-conflict NRM¹ government instituted a series of commissions to investigate the situation in all areas of government. One of them was the Education Policy Review Commission, which was appointed in 1987 under the chairmanship of Professor W. Setenza Kajubi (Syngellakis and Arudo, 2006:5).

The Government White Paper 1992

The 1992 Government White Paper on Education is the basis of official policy on the purpose and programmes of education in Uganda. While some of the programmes have been revised as a result of intervening events; the White Paper's articulation of the purposes of Ugandan's education system continues to be the supreme guidance for the sector. Its aims are to promote citizenship; moral, ethical and spiritual values; promote scientific, technical and cultural knowledge, skills and attitudes; eradicate literacy and equip individuals with basic skills and knowledge and with the ability to "contribute to the building of an integrated, self-sustaining and independent national economy". The key policy thrust in the educational sector for both rural and urban Uganda includes providing equitable access to quality and affordable education to all Ugandans, propelling the nation towards achieving the goals of Poverty Eradication Action Plan (PEAP), meeting commitments to achieve Education for All (EFA), the Millennium Development Goals (MDGs) that ended in 2015 and now the Sustainable Development Goal (SDG) that is to end in 2030 and the Uganda Vision 2040, are all developments initiatives focussing on streamlining the Uganda education system with the aim of making Uganda to attain a middle income level status.

THE HIDDEN CURRICULUM AND KEY CONCEPTS

Pastoralism

There is no single definition that defines the term pastoralism, many authors have defined it in various ways; the Republic of Kenya (2012) describes it as a production system which is closely linked with the cultural identity that relies on raising livestock on pastures that may be commonly or privately managed and accessed through agreements based on negotiation, reciprocity and competition. By definition pastoralism refers to both an economic activity and a cultural identity but the latter does not necessarily imply the former. As an economic activity, pastoralism is an animal production system which takes advantage of the characteristic of instability of the rangeland environments, where key resources such as nutrients and water for livestock become available in short-lived and largely unpredictable concentrations. Crucial aspects of the pastoralist specialisation are: First, the interaction of people, animals and the environment, particularly strategic mobility of livestock and selective feeding, and secondly, the development of flexible resource management systems, particularly communal land management institutions and non-exclusive entitlements to water resources.

According to Swift (1998:3), pastoralism is a production system where 50% or more of household gross revenue, such as the total value of marketed production plus the estimated value of subsistence consumed within the household comes from livestock or livestock-related activities; or where more than 15% of household food energy consumption consists of milk products.

To summarise on the definitions of pastoralism, Maliki (1992) modifies it to encompass populations which are essentially linked to animal production but have also undertaken several adjustments including agricultural activities, trade and wage labour; and those who, due to specific circumstances, lost their livestock as a result of cattle theft or cattle rustling; but still hope to resume a normal pastoral life. These also include agriculturalists that have taken on pastoral livelihood with all its social, economic and cultural dimensions.

As a matter of fact, pastoralism is found in some of the most challenging, as well as rich and fertile, environments on earth, from the Nile and the Rift valleys to the steppes of Mongolia and the edges of the Sahara Desert as well as in the mountainous and lowlands regions in Europe. In East Africa the International Fund for Agricultural Development (IFAD) estimates the total number of pastoralists at nearly 200 million worldwide (Rota and Sperandini, 2009). From the steppes of central Asia to the highlands of South America, the types of livestock herded by pastoralists depend on the climate, environment, and geographical area, and include camels, goats, cattle, sheep, yaks, horses, llamas, alphias,

¹ National Resistance Movement that took over power in Uganda in 1986

reindeer and vicunas.

However, data describing the number and importance of pastoralism worldwide are highly incomplete. India pastoralism in the Rajasthan desert has been extensively researched, but insecurity in Pakistan and Afghanistan has limited the degree to which pastoral systems have been documented and understood (Hesse et al., 2015).

Similarly, there are regions of Turkey and North-west India that are also poorly documented in literature. In central Asia, particularly in Mongolia and the Commonwealth of independent states, there is a growing interest in supporting pastoralism, but the extent and practices of Mongol and Kazakh herders in North-west China are still vague as Chinese dominated regions of central Asia have been off-limits for research for decades. Andes pastoralism, once considered a borrowing from European traditions, is now known to be an ancient tradition but studies describing these systems are again patchy (Ibid).

In the Greater Horn of Africa that includes Somalia, Ethiopia, Kenya, South Sudan, Eritrea, Djibouti, Sudan, Tanzania and Uganda pastoralists and agro-pastoralists are estimated to be over 30 million people (FAC CAADP, 2012). In these countries, pastoralists have been shifting between a range of livestock and non-livestock based activities for millennia but with livestock remaining central to their social, economic and cultural livelihoods. Pastoralism in these areas is diverse and dynamic, and has continuously responded and adapted to the opportunities and challenges that face them. Most of these areas especially the East African countries is better researched, with a number of scholars focusing on some of the main pastoral groups, including the Masai (Spear and Waller, 1993), the Turkana (Lamphear, 1993), the Ariaal (Fratkin, 1991), the Borana and Rendille (Fratkin,

Within these communities pastoralists are differentiated by gender, age and wealth. Importantly, pastoralism is not just about the management of livestock. It also involves livestock products (milk, hides and in some cases, dungs) and integrating other activities such as agriculture, non-timber forest products and trade into their livelihood. The levels of engagements and the types of non-pastoral activities that support their livelihoods vary within and between groups based on the geographical location, age, gender and access to markets, amongst others. Because of this not all pastoralists are affected in the same way by the common problems of drought, land alienation, conflict and other environmental issues.

Transhumance

Transhumance is a production system that is highly mobile, so, individuals and their herds move between definite seasonal bases every year. In this case, some part of the family and/ or the herds of livestock seasonally move and the other part remains behind at a fixed location. The pastoralists that practice this kind of pastoralism in Uganda are the Jie, Dodos and the Karimojong.

Agro-pastoralism

Agro-pastoralism is a production system whereby crops are grown in particular season but the same parcel of land is used by the livestock for grazing when the crops have been harvested. In this system, the household basically depends on crop production supplemented with pastoralism. Some of the pastoralists involved in this mode of pastoralism are the Iteso of Katakwi, Soroti and Kumi of eastern Uganda; Langi of Apac and Lira of northern Uganda; and Ethur of Abim District in the Karamoja region.

Mobility

According to Bernard Van Leer Foundation newsletter No. 72 (1994:1, 2), mobility as a practice, is not a new phenomenon. The human race has been mobile and migratory since the early days as hunters, gatherers and shift cultivators. Although the degree of mobility in the 2nd millennium is unprecedented, and still remains a subject of debate and dilemma. Mobility by the pastoralists is not aimless or random. It is well protracted with objectives at certain times of the year and to particular places. It is well planned in a pastoral context. This mobility is an economically strategic technique of pastoral production that changes according to ecological conditions. In fact the pastoralists believe that livestock mobility stimulates and sharpens their reproductive instincts. These pastoralists leave areas even when there is permanent water because their animals need a variety of forage, soils with mineral mixes and vegetation. All these cannot be found in a single place. Adewale (2000:13) compares this movement situation to that of the Fulani pastoralists of West Africa who believe that mobility is as soothing as the breath of spring. Mobility is also considered as an insurance mechanism against spread of disease both among humans and livestock.

Pastoral education

The secret of the pastoralists is their intimate knowledge of a vast area of land, its meteorology, geology, hydrology, botany, fauna and disease patterns. This is a formidable body of knowledge in terms of inventory, hardly matched by any modern scientist. Knowledge of these values and norms should be transmitted and

translated through normative situations in order to contribute to the symbolic order of pastoralism. Neither the role nor the essential ingredients of pastoralism has ever been comprehended by education providers in Uganda. The pastoralists bring with them these skills' knowledge and experiences, as well as analytical abilities, which are not given opportunities to be used, demonstrated or even developed.

ASSUMPTIONS AND PREJUDICE AGAINST PASTORALISM

As previously mentioned pastoralists and agropastoralists are one of the most researched yet least understood groups in the world. Despite decades of empirical research, many policy makers, government staff, NGO personnel, and the broader public believe that the levels of poverty and conflict facing many pastoralists and agro-pastoralists is a result of their production system. Livestock mobility, a key feature of pastoralism, in search of markets and nutritious pastures and water and as a mechanism to avoid stress, is widely believed to be a primitive way of life that is uneconomic, environmentally destructive and incompatible with delivering services in a modern world.

As portrayed by Dwight (1976), in the African context, particularly in East Africa, the 'conservative native' has been the pastoralist. A widely held view about them in Uganda is that they are inherently conservative and obstinately resistant to all propositions for change, irrational economic actors, technically stagnant and primitive, wandering erratically and spoiling the rangelands by creating desertification, and exhibiting conservative and retrograde cultures and values.

Adewale in the *Sunday independent* April 9, 2000:13 corroborates in respect to the Fulani pastoralists of West Africa that the Fulani and their timeless way of life was becoming a great attraction for the world. These pastoralists had never seen a TV, E-Mail was a strange thing, and sighting a portable radio would cause a great deal of stampede and commotion. Adewale asserts that this amazing tragic primitivism is a legacy that runs through the veins of the average pastoralist family. Conservatism of these pastoralists is contextual because it depends on the way their system operates rather than on a particular stand they as individuals have chosen to take. Thus it is imperative that the process of change through education, should first address the pastoral forms and structures that are in place.

The pastoral prejudice and crisis in Uganda has resulted in what Maliki (1992:29) calls, "a crisis situation of massive impoverishment, social marginalisation, discrimination, destitution, disequilibrium, destabilisation, tribalism, refugee camps and subsequent history of progressive social and educational underdevelopment".

This has had an increasing impact on the practice of pastoralism as a mode of production and livelihood. These beliefs have consistently driven policy to settle pastoralists and introduce them to modern agricultural and livestock production techniques with little evidence of success.

Policy has consistently ignored both the scientific evidence on the dynamics of dryland ecosystems and the strategies and institutions used by local people to exploit environmental diversity and unpredictability to their advantage. The inability of local pastoral and agropastoral communities to articulate the rationale of their livelihood system and the scope and scale of its benefits to the economy, the environment and society further exacerbates their marginalisation. Top-down, technical solutions, often imported from elsewhere, are thus poverty, imposed exacerbating environmental degradation and conflict in many pastoral and agropastoral areas of East Africa and Africa as a whole.

In summary, studies indicate that over 30 million people in the Great Horn of Africa practice pastoralism and agropastoralism as central source of livelihoods (Hesse et al, 2015:13). Livestock are their social, cultural, spiritual and economic assets providing food and income for the family within and between generations. Yet this important production system is hidden or silent in the school and University curriculum of many countries including Uganda. With the exception of Tanzania and Ethiopia who have already mainstreamed pastoral studies as a common course and currently taught at the universities of Bule Hora, Jigjiga and Samara as part of their undergraduate and graduate programmes. The inclusion of pastoral studies to the school and University curriculum as a common or cut-crossing course unit would introduce students to the fascinating and rich world of pastoralism (Sifuna, 2005).

This would provide the students with knowledge and skills to analyse and understand pastoral systems as they exist today, and the options for their future development in support of national economic growth in a changing world. The curriculum would also help students from different personal and professional backgrounds to understand how pastoralism functions as a system, its contributions to local national and global economies and sustainable environmental management, and its role in promoting peace and harmony between pastoral and other communities.

GAPS AND CHALLENGES IN UGANDA SCHOOL AND UNIVERSITY CURRICULAR

The delivery of pastoralism as a subject is a process which begun many years ago but continued to be packaged within the agricultural domain. For instance in Uganda, curricular reviews have been done several time

but with little attention given to the area of pastoralism as evidently shown: In 2008 Uganda Agriculture Teaching Syllabus review (Senior 1-4) the sub-topic "important farming systems and practices "was the only content on pastoral system considered. This is taught in term one as a sub-topic whose objectives are: to describe the different farming systems and practices in Uganda. While in the National Certificate in Agriculture of 2012, Pasture Management and Silvi-Pastoral practices was the only module added. In the Primary Teacher Education Syllabus 2004 on Agriculture, it has a theme on Livestock production with the specific objective that trainee should be able to compare traditional and modern methods of rearing livestock. It does not come out that pastoralism should be handled.

Also in the Uganda Advanced Certificate of Education Agriculture Teaching Syllabus 2013, there is a subtopic on Livestock Rearing and the Environment and the learners are expected to acquire the competence of evaluating the environmental problems in routine rearing practices of livestock. This does not suggest in any way that Pastoralism would be used to deliver it. When it comes to other subjects like geography teaching syllabus (senior 1-4) there is a topic on changes from nomadic pastoralism (meaning, location and characteristics) to modern livestock farming: Ranching in Africa. This is not so different from what is taught under Uganda Advanced Certificate of Education in Geography where there is a topic on development of agriculture and nomadic pastoralism plus measures taken to improve nomadic pastoralism. In other words these are the only entry points on pastoralism that gives "just a lip service" to its beauty. The revisions of the syllabus at the different levels as seen above have not been able to give enough coverage on pastoralism.

At the Community Polytechnic Institutions where Agriculture is the main domain course taught in year one, topics such as farm structures, machinery and agricultural economics are the main issues covered, what is covered at this level too does not give students enough information on pastoralism. Also the knowledge on agriculture which is given at the community polytechnic institutions still follows strictly the European market needs. Generally agriculture which is taught at this level is given a small doze because the design has not changed much; it's still using the European design because they are still strong in decisions making.

At the universities, agriculture is the main domain and stand-alone courses with minimal concepts on pastoralism. In practice, it can therefore, be concluded that very little coverage or content is given to pastoralism or taught under the agricultural domain courses, and also there is very little coverage at both senior one and at the community polytechnic institutions. This clearly shows that the knowledge given to students who may wish to further their studies in pastoralism is inadequate or

completely missed out.

Besides, teachers also cover only what is provided in the syllabus. At the secondary level agriculture is taken by the majority of rural schools while ignored by urban or other well to do students. It is perceived that the students who take up the subject regards it for purposes of passing and improving on their grades but not to have the skills and knowledge to practice. Hence, this signifies the lagging behind of the concepts pastoralism and pastoral education.

Generally in Uganda other challenges include the high stakes testing and examinations driven syndrome. Examinations are done by students to pass and attain certificates at the expense of acquiring skills to apply to the real demands of the society. Yet various studies inform us that what is examined is what teachers teach. As noted by Cubberley (2009), the emphasis on high-stakes testing has a danger of narrowing the curriculum content and this is what has happened to the content of pastoralism in Uganda.

Notwithstanding the issue of attitude, it stands out as a serious challenge among the various actors that include the parents, students, teachers, educational practitioners and supporters. Many of these actors sometimes look at the inputs verses the outputs of education and how soon the results shall come. Yet the returns to education can be miles away from the time of successful completion. In turn this can influence decision making and is challenging when ranking priorities. To overcome such barriers, attempts and arrangements have been made of benchmarking study tours.

For instance, the exchange visit programs to other countries would improve on the situation particularly within the University settings. However, the experience of Kyambogo university 2014-2017 exchange program with the agricultural institutions in Israel has shown no big impact or value additions to the field of agriculture. Thus the experience and knowledge acquired by students when exposed to such opportunities of the exchange visits is confined within the individuals or lost. Such students on return join the rest of the students who remained behind looking, searching for jobs and employment without having an opportunity to share the new skills learnt from the multicultural setting. Hence, knowledge acquired is lost or confined just within the individuals.

OPERATIONALISATION AND RELEVANCE OF PASTORAL EDUCATION

Pastoralism with its strong emphasis on family and clan loyalties, and on common, rather than individual, ownership of land and forests, throws down a profound challenge to many of the assumptions that underlie 'modern' governance. Whether such visions can co-exist

is a test of the ability of governments and societies to recognise and appreciate the practice of pastoralism.

Given the relevance and importance of pastoralism to many societies, pastoral studies if developed and designed in school and University curriculum will address the 'knowledge gap' in two ways: by helping decision-makers and planners better understand the scientific rationale underpinning sustainable pastoralism while simultaneously strengthening the skills of pastoralists and their advocates to articulate the economic, ecological and social benefits of their livelihood systems and argue for their inclusion in national policy.

The curriculum will prescribe solutions or promote specific policy options. Using scientific evidence and case study material, the curriculum will demonstrate the logic of pastoralism in environments characterised by highly variable and unpredictable conditions, including drought exacerbated by climate change. It will show how pastoralism is a livelihood and land use system regulated by, and proactively exploited, ecology with complex modes of social, political and economic organisation that enable it to prosper in the high spatial and temporal diversity of dryland environments. The curriculum will also show that pastoralism, far from being outmoded and seen as uneconomic, is highly dynamic and intricately linked into the modern world contributing significantly to local, national and international markets in East Africa and beyond. On the basis of this knowledge, the curriculum will identify policy options relevant to the needs of pastoralists.

The curriculum will also target at leaders of pastoral civil society and other pastoral policy advocates as well as government, donor and NGO staff and other practitioners responsible for implementing development policy at the local and national level. The adapted curriculum will target relevant policy makers and practitioners in the public and private sectors to contribute to more informed decision-making in support of climate resilient development and service provision.

The pastoral curriculum will enable learners to have rich insight of the knowledge, skills and attitude required in pastoralism analysis. It will equip learners with ability to manage pastoralism as a system properly, develop seminar on various debatable pastoralism related issues, advise relevant strategies to pastoral areas and appreciate livelihood strategies employed by pastoral community to maintain their well-being.

On the Cross cutting issues, the curriculum will enable learners to understand how pastoralism works as a system that addresses the issue of sustainability with regards to gender and environmental aspects.

Most importantly, the curriculum will also introduce students to the basic concepts, origin and history of pastoralism, and location of pastoralists. This will mainly deal with the basic pillars of pastoralism that includes natural resources, livestock herd and pastoral society and institutions showing the interdependence of each system. The curriculum will also address the utilization and management of natural and livestock resources in a sustainable manner. The course will attempt to discuss the main functioning of the social institutions in pastoral societies that are related to natural resources. Additionally, it will address the socio-economic and environmental contribution of pastoralism.

STRATEGIES AND WAY FORWARD

Pastoralism as a practice is not actually new. But what is actually new is its concept through which education and socio-economic change is believed to occur at both user and societal level. It will be an intervention meant to bridge the gaps created by the limitation, false starts, irrelevancies and failures of the current education systems. To develop the curriculum the following aspects and strategies would be significant and important:

Developing the life calendar for the pastoralists

- 1. The Curriculum for Pastoralism should be content specific, contextualised, flexible, revolutionised in presentation and approaches, based on outcomes.
- 2. The curriculum should be diversified to take into account the respective functional needs and socio-economic requirements of pastoralism.
- 3. The curriculum should have a good balance of practical knowledge and skills that can be of immediate use to the pastoral communities in improving their conditions of living.

Human resource development

- 1. Pastoralism knowledge and skills should be integrated into all levels of education and training. A pool of expert pastoral educators should be developed to ensure that universities have crops of lecturers who can produce effective graduates.
- 2. There is need to continue to train both new and existing lecturers to ensure that they are adequately equipped not only to manage the pedagogical approaches to pastoral studies education, but also to remain connected to emerging developments

Relevant policies and curriculum

1. More policy debate is needed on how different actors can play various roles in ensuring a peaceful Uganda. This requires a curriculum that addresses the ways in which Uganda can recovery from its current political and

economic dilemmas regarding the problems of pastoralists. It is this reality that informs the centrality of the education sector in facilitating long-term, strong peace among the pastoralists.

- 2. Given the enthusiasm and huge uptake of pastoral education at university level, it is important for this thematic to be offered also with primary and secondary education.
- 3. Since the long-term goal of pastoral education in schools and universities is to contribute to the creation of a more peaceful community, it is important for universities to promote stronger links between themselves and the community. This could be done through collaboration with Civil Society Organisations as well as through community outreach and capacity building programmes that promote pastoral education in their local communities.
- 4. The uniqueness and relatively early pastoralism success of the pastoral communities' means that it has potential to become a regional and pan-African model. Other regions should incorporate lessons from Ethiopia and Tanzania that have designed pastoral study curriculum into their own initiatives as cross cutting course units at their universities
- 5. Teacher training is there, syllabus is there, secondary and community polytechnics institutions are there what is left is mainstreaming pastoral studies as a stand-alone programme into systems
- 6. Courses like animal husbandry covered in agriculture-breeding, production, nutrition, health, products are misplaced and should be linked to pastoral studies where they naturally fall. There is no doubt cattle is one of the animals that is widely taught.
- 7. The need for information on the functioning of the pastoralists to enable the education providers plan and design pastoralism as subject of study.
- 8.Integration of pastoral indigenous education including pastoral functions, behavioural patterns, attitudes, skills, knowledge, pedagogical skills and learning methodology should all be packaged together to make pastoral education relevant and essential to Ugandans and to the communities that rely on pastoralism as a way of livelihood.

CONCLUSION

The study has focussed on the trajectory of the process of mainstreaming pastoral education in the school and University curriculum in Uganda, including an analysis of the strategies that have been used in the Uganda education system from the colonial to the present day. The study has demonstrated that higher education has a broader mandate that goes beyond training learners in specific job related skills. The number of university programmes focussing on pastoral studies is increasing within the horn of Africa. The pastoral studies education

as a common course has been introduced and currently taught at the universities of Bule Hora, Jigjiga and Samara as part of their undergraduate and graduate programmes. The common course introduces students to the fascinating and rich world of pastoralism in Ethiopia and beyond. Undoubtedly universities in Ethiopia have contributed not only to the discourse of pastoral studies, but also to its practice.

Additional outcomes of the pastoral studies programme include the creation of platform for collaborative efforts to rebuild higher education institutions to evaluate their pedagogy as well as other processes in the provision of teaching and learning. The study has examined the potential of higher education as a tool for pastoral studies and a platform for generating concrete socio-economic and political transformation at community and national levels. By mainstreaming pastoral studies in the various curricular in Uganda, it would demonstrate that higher education in a stable state like Uganda could not be underestimated and the role of universities in providing a solution to the problems of pastoralists.

To conclude, this work has not only been informative but significant to government and partners in the education provision to initiate a general rethinking establishment of Pastoralism as a subject of study in the school, college, tertiary and University curricula; to policy makers to create realistic policies that can enhance appropriate implementation of Pastoralism as a subject of study; to curriculum designers and developers in designing and developing the programme that is relevant to the needs, aspirations and interests of the community, and that portrays the good image of Pastoralism; and finally to other education providers in involving the pastoralists in the evolution of the programme from their contextual perspectives.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

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