

LITERACY FOR SUSTAINABLE DEVELOPMENT IN A KNOWLEDGE ECONOMY

Edited by
**ABBA ABUBAKAR HALADU
KESTER O. OJOKHETA
ADESHINA ABIDEEN OLOJED**

LITERACY FOR SUSTAINABLE DEVELOPMENT IN A KNOWLEDGE ECONOMY

Knowledge has been widely and universally recognized as the most important factor of production in a "new economy". The production and utilization of knowledge is, therefore, essential for development. Ever since the term knowledge economy was coined, most countries, especially in the developing world, where knowledge gap (K-Gap) tremendously exists, have been striving not only to reduce this gap but also to embark on an ambitious plan to use knowledge as a base for economic development.

One of the crucial variables for achieving a knowledge economy is literacy, which is usually perceived as the starting point of sustainable development - a cardinal principle driving knowledge economy.

This special book in honour of one of the most illustrious advocates of literacy for empowerment and emancipation of youths and adults, especially in Africa - Professor Rashid Adewumi Aderinoye, is essentially devoted to the examination of various components of literacy. It covers all areas of thought on literacy and will serve as an encyclopaedia on literacy in Africa. It will serve the purpose of quenching the thirst for knowledge on literacy for anyone interested in knowing more about literacy as well as various stakeholders involved in the promotion of literacy.

Crafted and Bound Wordworks
1436A UI-Secretariat Road
Customs, Ibadan, Nigeria
08053381432 • 08098290700
craftedandbound@gmail.com



ISBN 818-878-54185-8-8

Education for All: Rethinking the Pastoral Economy for Sustainable Development

Case study of pastoralists in Kwara State, Nigeria

S.A. Aderinoye-Abdulwahab, M.B. Aliwajud-Adewusi, A.T. Dolapo

Introduction

Pastoralism describes a situation whereby people herd animals to sustain their livelihood (Bhasin, 2011). Despite various criticisms about pastoralism, it remains a successful strategy to support a population where there is little access to social, cultural, physical, biological and environmental amenities/facilities (Catley et al., 2013). The importance of this industry cannot be over-emphasized. It is responsible for the production of milk, beef, hide and skin. Pastoralists are usually found at the borders of communities, and they live in such areas so as to be able to access pasture for their livestock. This has resulted in marginalization as no one seems to remember them either for good or bad. Carter and Barrett (2006) stated that people who are below the marginalized threshold are ruined because they cannot access social facilities due to poverty; on the contrary, people above the threshold are productive and advanced. Furthermore, the definition of pastoralism in Nigeria has marginalization as a defining characteristic (Umar, 2006). This is apparent because pastoralists do not play any role in decision making in the society. They are seen as strangers and illegal settlers.

In Nigeria, 90 per cent of cattle are owned by the Fulani ethnic group and they constitute the core of traditional pastoralism. This group of people are settled in the arid and semi-arid regions of the country. They however, migrate from one

part of the country to another in search of grazing land and water for the animals (Umar, 2006). In fact, the contribution of the livestock industry to Nigeria's GDP rose from 37.38% in 2002 to 41.91% in 2006 (CBN, 2006). Why then would such a group or community be relegated to the margins when their contribution to the economy is significant? This study therefore aims to determine, after a critical review of academic works combined with empirical data applicable to the study area, whether these group of people are marginalized and if they have adequate access to facilities such as education and other social infrastructure and control over productive resources such as land.

Pastoral communities rely heavily on their herds as a means of survival. As pastoralists are mainly from the arid and semi-arid regions, they are likely to be affected by harsh weather conditions such as droughts which have serious ecological and economic effects on rangelands (Vetter, 2009). This is because their animals may find it more difficult to graze the lands; and the lack of food and water could result in malnutrition and death of the animals (Carpenter et al., 2001). Also, human-induced climate change such as desert encroachment makes grazing difficult. Christensen et al. (2007) stressed the fact that global warming is fast becoming an issue; and that Africa is likely to experience as much as 20% drying by the end of the 21st century. Boyd et al. (2008) emphasized that many of the continent's farmers rely on rain-fed agriculture.

According to the Centre for Environmental Economics and Policy in Africa (CEEPA, 2009), it is estimated that food production in Africa would be halved by the year 2020 because the economies of Africa depend largely on weather-sensitive agropastoral systems, such as livestock rearing. Despite this, grazing livestock remains an important asset, especially for people in the dry region (Dickhoefer et al., 2010) and this industry is an important source of livelihood for both genders (Turner, 2009). Therefore, pastoral agriculture is an integral part of rural economy as livestock serve as a source of cash to the family thereby preventing social depression which arises as a result of lack of financial resources. Again man-made factors, such as attitude of government, put pastoralists' livelihoods in a deplorable state as a result of marginalization (UNICEF, 2007).

This study presents a section of a research which addresses the marginalization of pastoral communities. It draws from secondary sources as well as qualitative findings from the field. It is the norm for pastoralists from the study area to herd their cattle while the wives stay back to look after the home. The women thus become the sustainers of the household because their husbands are

away from home most of the time. Sometimes, the men graze cattle for months before returning home and even where they return home daily, they go from morning till late in the evening, leaving the women to shoulder the responsibility of maintaining the households. This study therefore sought to determine the social amenities and infrastructure in place for pastoralists in the study area, as well as to investigate the availability and access to productive resources and extension services. It also touched on the role of extension education in the livelihoods of pastoralists in the study area.

Methodology

Nigeria is located in the western part of sub-Saharan Africa. It is bordered by the Republic of Benin to the west, Niger and Chad to the north and Cameroun to the east. While pastoralists are largely located in the northern region of Nigeria, Kwara State was purposively chosen for this study because it is an area to which pastoralists have largely relocated due to acute desertification in northern Nigeria (Medugu et al., 2011). The state shares Nigeria's border with the Republic of Benin to its west, and is bordered by Sokoto and Niger states to the north, while the River Niger is its border in the south. Created in 1967, Kwara State is divided into four zones by the state Agricultural Development Project (KWADP) based on its agro-ecology. The state is referred to as the "State of Harmony" because it is home to diverse cultures and ethnic groups such as the Yoruba, Hausa, Fulani and Nupe. Agriculture is the mainstay of its economy and pastoralists have settled there in large numbers.

Based on the zoning system of KWADP, six local government areas (LGAs) were randomly sampled from the four zones. A purposive sampling method was used to identify areas where pastoralists are found in large numbers within these LGAs. These resulted in the choice of 16 pastoralist settlements where a simple random sampling procedure was thereafter used to select 95 respondents, comprising pastoralists, their wives and mature children. The research also elicited information from 25 extension agents of the Kwara State Agricultural Development Programme (KWADP). The populations for the study therefore included pastoralists, their families, and extension agents of KWADP.

This study employed both qualitative and quantitative approaches to data collection and analyses. The qualitative approach was used to elicit information from the pastoralists' families and this included observations, focus group discussions, and key informant interviews. One reason why the qualitative method of data collection was used is because McNeely and Pitt (1985) stated that this

approach enables researchers to penetrate the minds of their informants. The quantitative approach was a questionnaire which was designed to get information from the extension agents of KWADP.



Figure 1. Map of Nigeria showing Kwara State.

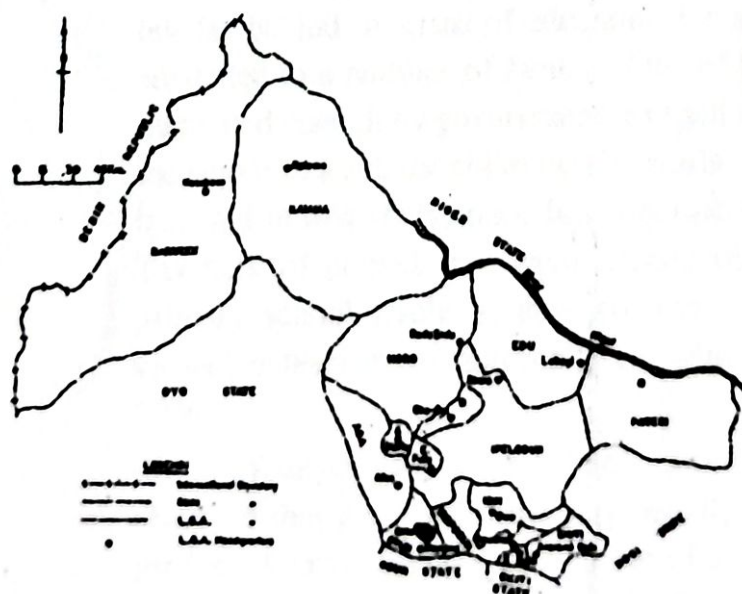


Figure 2. Map of Kwara State.

Results and Discussion

Poor and extremely low living standards

The study found that the sampled pastoralist communities lack basic infrastructure such as schools, hospitals, tap water, modern buildings, and good road networks, among others. Top on the list of their concerns is the lack of schools for their children. Their children have to walk long distances to nearby villages. Again, if the children manage to go to school, oftentimes, there are no teachers to teach them. This result is supported by the findings of Tahir (2006), who emphasized that it was not easy to recruit teachers who can endure the harsh conditions under which the nomads live. He further stated that even if it were possible to recruit such teachers, retaining them would be a Herculean task. This was also confirmed during this study as the researchers actually saw a school with only two classrooms which were not only deserted, but were also in a deplorable condition. There were goats in them and the school had obviously not been used for a long time. It is therefore not surprising that a report by GMR (2010) stated that pastoralists are left far behind in terms of education for all. This deplorable condition could be attributed to a number of factors. One of them could be that the teachers are not motivated enough by government; as such they do not see any reason to go far into the woods to teach the children of nomads. Of all the sixteen pastoralist settlements included in this study, none has adequate provision for schools for the children. Teachers of nomads are even doubly marginalized in the sense that first, as primary school teachers, they are seen as low-ranking, and second, they are viewed as teachers of children living within the margins, also ranked low (Umar, 2006).

Ranked next after schools was the issue of lack of hospitals. It was observed that the pastoralists rely heavily on plants and herbs as curative agents for their illnesses. There was a case of a woman with a three-year old child who could not sit, stand nor even crawl. The child had been sick since he was a year old but the mother was not able to take him to hospital as she would have to travel several miles to get to one. The only alternative she had was to use local herbs. Omotayo et al. (2005) confirmed the poor health status of children of pastoralists in Nigeria which may be due to the poor and extremely low living standards among pastoralists. The low living standards could be attributed to inadequate facilities such as the case mentioned above. The pastoralists however admitted that they would make use of modern health care if the facilities are available.

Obvious relegation of a culture

It is unfortunate that wives of pastoralists are further marginalized within their community. This is evidenced in the fact that due to socio-cultural factors they are denied access to certain benefits, e.g. inheritance. An example is in the area of land ownership. It is a male-dominated society and only male children inherit land from their fathers. It is also male children that automatically own the father's cattle. The females are left with almost nothing as it is believed that they will move to their husbands' houses in due course. A woman had this to say: "I inherited six cattle from my father as the only child of my mother but whatever I have is for my husband. Hence, the six cattle had been joined to my husband's herd". This finding is similar to that of Devereux (2006), who also found that Somali parents favour their sons over their daughters in access to health care and education.

Various governing bodies across the world usually hide under the pretext that pastoralists are not only small in number, but are scattered and prone to high mobility, as such there is difficulty in reaching them with basic amenities and infrastructure (Devereux, 2006). In addition, Hagmann (2005) stated that governments hesitate to extend their magnanimity to pastoralists because of the high rate of conflict and civil insecurity among them. Are these pointers to marginalization of a people?

Ignorance of methods of improving output

Education is an important tool when it comes to technology. Pastoralists also want an easier way of doing things but they do not know how. The facilities are not available for them to use. They are aware that there are machines that could help them milk their cattle easier and faster, but they cannot afford such equipment. It is emphasised that agricultural growth would go a long way towards reducing poverty (Colli et al., 2006), but how can pastoralists achieve such growth to enhance sustainable development if they are prone to the above-mentioned deprivations?

Bearing in mind that pastoralists are not always there for their families. They leave their families behind while they go in search of pasture and water for the cattle. Their wives are left to fend for themselves as well as their children. The wives of pastoralists produce cheese from the milk obtained from the cattle. The entire process is done manually and takes a long time. These women depend on the proceeds from cheese as a means of sustenance. However, when the husbands have relocated with the cattle, the women do not have milk to process into cheese,

they therefore temporarily lose their source of livelihood. Even during periods when their husbands are around, the women make cheese but cannot keep it beyond a day. The shelf life is short because they lack the knowledge and storage facilities to extend the shelf life. Pastoralists also live in areas where there is no electricity supply, so they are unable to use storage facilities such as freezers.

A way out of this is for both government and non-governmental organizations to facilitate a learning process through the use of extension agents. When the men have taken the cattle for grazing, the women could engage in a series of learning processes where they would be taught how to cope with different economic and environmental conditions as well as diversification techniques that will enable them to have a means of sustenance, even when their husbands are away.

Zero access to extension agents and facilities

Extension was traditionally described as the service to extend or transfer new technology to rural people so as to improve their livelihoods (Davis, 2008). It included non-formal education and management skills which aimed to train farmers, improve yields and increase production. In more recent views, agricultural extension goes beyond training farmers and technology transfer. It has been described as including: facilitation, learning, partnering with other agencies and advisory services (Davis, 2008). Thus, extension in today's world can be defined as a set of organizations that support people who are involved in production to improve their livelihoods (Birner et al., 2006).

Surprisingly, the pastoralist communities in this study had never been visited nor contacted by any extension agent in the ten to fifteen years prior to the study. The pastoralists believed that they could improve and increase their output if they had the opportunity to utilize modern equipment. For example, a milking machine would do a neater and faster job than the conventional hand milking. If their outputs are increased, there would be an increase in their incomes and possibly an improved and sustainable livelihood. Therefore, poverty could be reduced by investing in extension services. Romani (2003) stated that if extension is properly designed and delivered, it would lead to increased productivity. This can be achieved by helping rural people and pastoralists to have adequate access to extension services in order for them to make the best use of the resources at their disposal.

The majority of the extension agents that were sampled testified that they rarely visited the pastoralists partly because pastoralists live in the boundary areas of the state. It was also revealed by the agents that pastoralists are often hostile to visitors. However, extension agents are supposed to be agents of change. They need to adopt a variety of methods to engage pastoralists in a manner that will establish trust. Could it be that the extension agents do not have the requirements to efficiently extend their services to the pastoralists? Twomlow et al. (2008) revealed that the level of understanding of coping and adaptive strategies among researchers and extension workers is inadequate. This could be a reason why extension agents decide to ignore pastoralist settlements when discharging their duties.

Conclusion

The study concluded that pastoralists in Kwara State, Nigeria, like their counterparts in other parts of the world, as reported in various studies, are confined to the margins. They live in areas where they are not able to access social infrastructure such as schools, electricity, potable water, good roads and hospitals. Their children are not able to attend schools because the available facilities are inadequate to cater for them. To worsen the situation of pastoralist households, the wives find it difficult to sustain their livelihoods when their husbands are away grazing the cattle. It was also found that their circumstance is exacerbated by alienation due to the fact that extension workers fail to include them in their schedule of duties.

Recommendations

First and foremost, there is a real need for stakeholders in extension education to start a massive awareness campaign against the marginalization of pastoralists. Thereafter, there will be an urgent need for government to adequately provide basic amenities such as schools and other infrastructure for pastoralist settlements. Further to this, pastoralists should be re-orientated from seeing themselves as being marginalised. Moreover, extension workers must begin to include pastoralists in their schedule of duties. Finally, teachers should be adequately trained and motivated to teach nomads.

References

- Bhasin, V. (2011). Pastoralists of Himalayas. *Journal of Human Ecology* 33 (3): 147-177.
- Birner, R., Davis, K., Pender, J. et al. (2006). *From Best Practice to Best Fit: A framework for designing and analyzing agricultural advisory services*. ISNAR Discussion Paper No. 5. Washington, D.C.: IFPRI.
- Boyd, E., Osbahr, H., Ericksen, P.J. et al. (2008). Resilience and 'climatising' development: Examples and policy implications. *Development Journal* (51): 390-396.
- Carter, M.R. and C.B. Barrett. (2006). The economics of poverty traps and persistent poverty: An asset-based approach. *Journal of Development Studies* 42(2): 178-199.
- Carpenter, S., Walker, B., Anderies, J. M. and Abel, N. (2001). From metaphor to measurement: Resilience of what to what? *Ecosystems* 4: 765-781.
- Catley, A., Lind, J. and Scoones, I. (eds). (2013). *Pastoralism and Development in Africa: Dynamic change at the margins*, London and New York: Earthscan from Routledge.
- CEEPA. Climate Change and African Agriculture. Policy Note 17 (2009): 1-7. 12th Apr. 2009. <http://www.ceepa.co.za/docs/POLICY%20NOTE%2017.pdf>.
- Central Bank of Nigeria. (2006). *Annual Report and Statement of Accounts* for the year ended 31st December 2006. CBN Publications.
- Christensen, J. H. et al. (2007). *Climate Change 2007: The Physical Science Basis*. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge, UK and New York, USA: Cambridge University Press.
- Colli, P., Kydd, J., and Dorward, A. (2006). Overcoming market constraints on pro-poor agricultural growth in sub-Saharan Africa. *Development Policy Review* 24(3): 243-277.
- Davis, K. (2008). Extension in sub-Saharan Africa: Overview and assessment of past and current models and future prospects. *Journal of International Agricultural and Extension Education* 15: 15-28.
- Devereux, S. (2006). *Vulnerable Livelihoods in Somali Region, Ethiopia*. Brighton: Institute of Development Studies. IDS Research Report 57.
- Dickhoefer, U., Buerkert, A. et al. (2010). The role of pasture management for sustainable Livestock production in semi-arid subtropical mountain regions. *Journal of Arid Environments* 74(8): 962-972.
- GMR. (2010). *Reaching the Marginalised*. Education for All Global Monitoring Report 2010. Paris: UNESCO.
- Hagmann, T. (2005). Beyond clannishness and colonialism: Understanding political disorder in Somali Region, 1991-2004. *Journal of Modern African Studies* 43(4): 509-536.
- McNeely, J. A. and Pitt, D. (eds.) (1985). *Culture and conservation: The human dimension in environmental planning*. IUCN.
- Medugu, N. I., Majid, M. R. and Johar, F. (2011). Drought and desertification management in arid and semi-arid zones of Northern Nigeria. *Management of Environmental Quality* 22: 595-611.
- Omotayo, A. M. et al. (2005). Prevalence and Clinical Profile of Malaria among Settled Pastoral Fulani Populations in southwest Nigeria. Paper presented at the 17th World congress of epidemiology, Bangkok, Thailand, 22-26 August, 2005.

- Romani, M. (2003). *The Impact of Extension Services in Times of Crisis: Côte d'Ivoire 1997-2000*. Centre for the Study of African Economies, University of Oxford.
- Tahir, G. (2006). Keynote Address: Nomadic Life and the Implication for Education Provision. In: MOEK/UNICEF, Forum on Flexible Education, Reaching Nomadic Populations, Garissa, Kenya, 20-23 June, 2006. Summary Report, Kenya Ministry of Education, UNICEF, Commonwealth of Learning and Commonwealth Secretariat, Nairobi.
- Turner, M. D. (2009). Capital on the move: The changing relation between livestock and labor in Mali, West Africa. *Geoforum* 40(5): 746-755.
- Twomlow, S., Urolov, J.C., Jenrich, M. and Oldrieve, B. (2008). Lessons from the field - Zimbabwe's Conservation Agriculture Task Force. *Journal of SAT Agricultural Research* 6.
- Umar, A. (2006). The teacher education curriculum and the world of work: A study of teachers of disadvantaged children in Nigeria. *Teacher and Teacher Education* 22(7): 777- 787.
- UNICEF. (2007). Nomadic Education in the Islamic Republic of Iran. Eastern and Southern Africa Regional Office (ESARO).
- Vetter, S. (2009). Drought, change and resilience in South Africa's arid and semi-arid rangelands. *South Africa Journal of Science* 105(1-2).