



Review of the literature on Pastoral Economics and Marketing:

Kenya, Tanzania, Uganda and the Sudan

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Introduction

This is a report to the World Initiative on Sustainable Pastoralism (WISP) within the framework of its Economics of Pastoralism consultancy, which seeks to collate and document information on economic valuations of pastoralism in the East African countries of Kenya, Uganda, and Tanzania, as well as Sudan. We were however not able to gather much data and information about Sudan, with the result that the report is mainly concentrated on the three East African countries.

The report confirms the paucity of data about the value of the contribution of pastoralism to national economies, not because that contribution is lacking, but mainly because the analytical framework of these economies does not permit its full appreciation. Even where efforts have been made to collect data, this has been limited to data on livestock and livestock products such as milk, hides and skins sold at national markets. Non-monetised contributions such as manure, draught power, control of bush and weeds, recycling of household waste are not captured or acknowledged. Nor is the contribution that pastoralism makes to the conservation and wildlife-based tourism¹.

At the heart of this inadequate appreciation of the contribution of pastoralism to national economies is a pervasive misperception of pastoralism and pastoralists b or acku0dsabout te, Tw (alists b or

Many of the studies of pastoralism and pastoral livelihoods have focused on natural resource

Understanding the rationale of pastoralism

Pastoralists in the arid lands of Eastern Africa live in environments that are for the most part

Pastoralism in Kenya, Uganda, Tanzania and Sudan

Pastoralism is a major livelihood and production system in Eastern Africa, with pastoralists found in all the countries of the region. Although their numbers differ across the individual countries, pastoralists face similar challenges and are perceived in the same light in so far as their contribution to national economies is concerned⁸.

Kenya is home to an estimated 4 million pastoralists, constituting more than 10% of the population. Pastoral and agro-pastoral communities occupy the arid and semi-arid land that constitutes 80% of the national land mass⁹. The majority of pastoral communities inhabit the northern rangeland districts of Turkana, Samburu, Isiolo, Wajir, Garissa and Mandera, and the southern districts of Kajiado and parts of Narok. The semi-arid districts of Machakos, Kitui, Tharaka- Nthi and Mbere in Eastern lowlands, and Tana River and Taita of the coastal hinterlands are characterized as agro-pastoral areas.

The major pastoral groups are the Maasai, Turkana, Pokot, Samburu, Garbra, Borana, Rendille, Somali, and Oromo. In addition, there are agropastoralist groups like the Kamba, Kipsigis, Nandi, and Tugen. In effect, pastoralists constitute a formidable economic grouping in the country, even if this is not always reflected in economic data or acknowledged in economic policy discussions.

In Uganda, pastoralism is practiced mainly along what is characterized as the cattle corridor, which runs from Mbarara in the South West to Kaabong in the North East of the country. The corridor is said to constitute 42% of the country's landmass and 51% of its land area. It is estimated that over 60% of all households in the cattle corridor are traditional pastoralists, while nationally pastoralists constitute 22% of the population. However, upto 80% of the population derive their livelihoods from subsistence agriculture and livestock production producing 85% of the milk and 95% of the beef consumed in the country¹⁰.

Large populations of pastoralists are also found in other districts outside the cattle corridor

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accommodate livestock in one place all year round. Movement of animals from one location to the other is therefore pragmatic and imperative in the control of environmental degradation. Access to pastoral lands is defined by customary rights that vary from one region to the other, but are characterized by communal grazing.

Marketing infrastructure for pastoral products

As has been indicated above, pastoralists provide the livestock products that satisfy the local markets in the countries of Eastern Africa. They produce the meat, milk, hides and skins as well as fresh blood. The thriving nyama choma (roasted meat) industry in Kenya, Uganda and Tanzania depends entirely on the pastoral sector for the supply of cows, goats and sheep for slaughter¹⁵. Rural communities depend on milk from pastoral herds, as do pastoralists themselves; while hides and skins for both the local and the export market are also sourced from pastoral areas.

However, pastoralists are severely constrained by marketing infrastructure, which across the region is either very poor or non-existent. This makes it difficult for pastoralists to reach the competitive markets in the major cities and towns of the region, and provide leeway for middlemen to exploit them by buying livestock and livestock products cheaply from them only to sell them at higher prices in the major markets. Even when markets for livestock and livestock products has opened up in places like the Middle East, it is the middlemen who have benefited, taking advantage of their access to information and credit to buy livestock from

The situation is no different in Tanzania, with pastoral areas suffering similar marginalisation and constraints in terms of infrastructure. For instance, pastoralists from Northern Tanzania, especially those in Ngorongoro district, tend to sell their livestock across the border in Kenya, simply because they have no access to markets such as Arusha and Dar es Salaam as a result of the absence of infrastructure. Instead of addressing these constraints to pastoral production, the government of Tanzania is intent on a modernization agenda that is focused on commercialization of livestock production but does little to address the real challenges to pastoral livelihoods¹⁷. The wording of the stated vision of the government for the livestock industry in Tanzania read together with other statements about pastoralism in key policy documents suggests a very pessimistic outlook for pastoralism and pastoral livelihoods¹⁸. Indeed the government has indicated a desire to adopt what is referred to as the Botswana model of livestock production, even though its appropriateness to Tanzania has not been verified¹⁹.

The livestock market in Sudan is relatively more developed. There are primary markets and secondary markets within which registered livestock traders/brokers operate. The brokers collect cattle and shoats from village and sell them to big traders. In this arrangement, the agents arrange for the trekking of the livestock to market places and oversee the processes of transaction. Transportation is either by road or trekking to the market terminals, a process that is both tedious and expensive.

Making the economic argument for pastoralism

In modern development discourse, it is important that the case for pastoralism is argued from an economic perspective. For policy makers to pay attention to the needs of pastoralists and put in place the infrastructure to support the production system, they have to understand that pastoralism is an economically viable activity that makes a meaningful contribution to household and national economies.

Economics underpins modern development discourse. It analyses processes of wealth creation by focusing on the relationship between human activities and factors of production such as land, labour, capital and entrepreneurship and how this relationship contributes to the satisfaction of human needs and wants. Economic valuation thus places value on activities for the production of wealth. The values are ordinarily denoted in monetary terms.

This valuation is important in decision making over the allocation of resources in modern societies. It makes possible the prioritization and selection of the best means to satisfy human needs at minimum costs and at peak gains; and helps determine the opportunity cost of specific activities.

In determining national wealth, economic valuation is used to calculate the Gross Domestic Product, which although it has its weaknesses due to aggregation of economic variables, has come to be accepted as a useful and replicable valuation. To arrive at the GDP, productive activities within an economy are priced and analyzed in terms of the input-output continuum. Thus the economic rationale of productive activities is determined on the basis of their monetary contribution to the national economy.

This means that the availability and reliability of data is critical to the appreciation of the economic value of a productive activity. This in turn means that such production systems as

¹⁷ For a discussion of the policy constraints to pastoral production in Tanzania, see A.Z Mattee and M. Shem, *Ambivalence and Contradiction: a review of the policy environment in Tanzania in relation to pastoralism. Issue Paper No. 140.* IIED Drylands Programme, March 2006.

¹⁸ The vision for the livestock industry states that "By the year 2025, there should be a livestock sector, which to a large extent shall be commercially run, modern and sustainable, using improved and highly productive livestock to ensure food security, improved income for the household and the nation while conserving the environment". *National Livestock Policy (Final Draft)*, p.9. See also the efforts to regulate the meat industry envisaged in The Meat Industry Act, 2006.

¹⁹ For an analysis of the Botswana model, see Adrian Cullis and Cathy Watson. *Winners and Losers: Privatising the Commons in Botswana. Securing the Commons No. 9.* IIED Drylands Programme, March 2005

pastoralism, which is household-based and informal, are at a disadvantage when it comes to establishing their economic value. While it is possible to ascertain data on pastoral products that are exchanged in the market place such as livestock, meat, milk, hides and skins, key aspects of pastoral production and intra-pastoral exchange remains outside the orbit of formal data collection, and are thus invisible to the national economic statistics.

It is evident that traditional economic valuation is not capable of telling the complete story about the contribution of pastoralism as a livelihood and production system. The pastoral production system is complex and has to be appreciated in its entirety rather than seen in terms of specific 'products' such as livestock, meat, milk, hides and skins. These are important but they are only components of a system and can only tell part of the story.

Major challenges persist in the market place so terms simpleucts) Tastoralism as a liveli

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provides the raw materials for agro industries, thereby adding to the value of its overall contribution to the national economy²².

The contribution of pastoralism to the livestock sector is substantial. Offtake rates from pastoralists' herds are estimated at 6-14% for cattle, 1-3% for camels and 4-10% for sheep and goats²³. This translates into 220,130-513,630 head of cattle, 9,250-28,000 camels, 231,960-597,000 goats, and 156,600-391,500 removed from pastoral herds annually. The value attached to these range from Kshs. 5 billion to 8 billion²⁴.

Table 2: Estimated values of pastoral herds and annual slaughter offtake²⁵

Species	Total number	Value (million Kshs)*	% average offtake	Average offtake (numbers)	Average value (million Kshs)

Tanzania has the largest herd of livestock among the three East African countries, estimated at 33.7 million, excluding pigs, poultry and other species. The sector contributes 13% to the agriculture GDP and 6.1% to the national GDP. A large proportion of the national herd is held by pastoralists and agropastoralists, with some estimates putting the figure as high as 99%. A direct result of the contribution of pastoralism to the national economy in Tanzania is the fact that the country does not import any meat, relying entirely on its national production to satisfy the demand for these products²⁶.

In common with Kenya and Uganda, the contribution of pastoralism to the national economy of Tanzania is largely invisible. There are national statistics on the production of livestock products such as beef, milk, hides and skins, but these do not in themselves show what comes out of the pastoral sector. Moreover, the fact that pastoralism represents an effective strategy for food security for communities that live in arid and semi-arid rangelands, enabling them to convert scarce and patchy grazing resources into a steady supply of food calories and nutrients for human populations in the form of milk, meat, blood and trade of animals and their products, is not reflected in the national accounts.

Conclusion: limits of monetary valuation

The key challenge to the appreciation of the real value of pastoralism to local and national economies in East Africa lies in the difficulty of capturing the true monetary value of the totality of pastoralism as a livelihood system. Such valuation as has been done has been focused on aspects of pastoralism, namely livestock and livestock products, especially such of these as are traded outside at formal markets within and outside the countries. Indeed, as is illustrated by the case of the livestock brought into Nairobi from Northern Tanzania, even cross-border trade is not always readily captured in statistics.

This limitation means that not all that pastoralism contributes to national economies is presently captured and appreciated. Indeed, just as we talk of externalization of costs in industrial production, (for instance when the health and social costs of polluting industries are borne by the society and not reflected in the accounts of those industries), pastoralists can be said to be victims of the externalization of benefits. That is to say, there are benefits derived from aspects of pastoral land use and production that are not attributed to pastoralism and are excluded from the valuation of what the system contributes to national economies.

A case in point is conservation tourism, especially in Tanzania and Kenya. Much of the land on which the major protected areas of these countries lie is land that belongs to pastoralists. The wildlife of which these countries are so proud and which is the backbone of the tourist industry has for centuries been taken care of by pastoralists. Indeed, it is mainly because pastoral land use is compatible with wildlife conservation that it has been possible for the protected areas to survive in the midst of pastoralists. There are many areas of East Africa which had lots of wildlife in the past, but in which the wildlife was either hunted to extinction or their habitat converted to agriculture, settlement and other land uses that are incompatible with wildlife conservation. In any case, unlike other communities in the region, pastoralists have preserved much of their culture and protected it against the onslaught of Westernization, and this has now become a major attraction to tourists boosting their numbers and the income from the sector.

Moreover, most of the protected areas have been established on land that pastoralists have traditionally used to pasture their livestock. In places like Ngorongoro district in Northern Tanzania, the entire landscape is a protected area either as the Ngorongoro Conservation Area, the Ngorongoro Game Controlled Area or hunting blocks. The wildlife based tourist industry that is such an important part of the national economy in Tanzania can rightly be said

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“The contribution of the livestock industry to the economy is not limited to its share in the total GDP but it also plays other roles that include the following:

- (i) supply food products thus contributing to the national objective of food security;*
- (ii) converts vegetable resources into products suitable for human consumption;*
- (iii) acts as an inflation free store of value and investment channel;*
- (iv) Source of income and employment opportunities mostly in the rural economy;*
- (v) provides hides and skins, manure, draught power; and*
- (vi) fulfils cultural roles, which are valuable to many communities”³²*

Clearly, a lot remains to be done if the true value of pastoralism to local and national economies has to be ascertained, acknowledged and appreciated. If the foregoing are duly recognized as integral to national economies, and if the same are given values that are then integrated into the national accounts, then the true value of pastoralism will begin to be manifested. New valuation methodologies need to be developed in order to capture the non

and to a development approach that secures such identity. This is consistent with global commitments to protect and promote the rights of indigenous peoples.

Annotated bibliography on economics of pastoralism

Anders Hjort af Ornas (edt.) *Nomadic Peoples: Camel Pastoralism in the Horn of Africa. Number 29:1991. Commission on Nomadic Peoples International Union of Anthropological sciences. Reprocentralen HSC. Uppsala. Sweden.*

Nomadic Peoples is an international journal published for the Commission on Nomadic Peoples (of the international Union of Anthropological and Ethnological Sciences). Its primary concern is current circumstances and future possibilities of all fully or partly nomadic and pastoral people around the world.

Camilla Toulmin. (1983). *Economic Behavior Among Livestock- Keeping Peoples: A Review of the literature on the Economics of Pastoral Production in the Semi- Arid Zones of Africa.*

This paper investigates the several concepts used in analyzing the economics of traditional systems of pastoral production in the semi-arid areas of Africa. It examines the notion of household viability and theories of adaptation within the pastoral sector to imbalances between its main components- land, people and livestock. It also examines how pastoral production is affected by the wider economy and how the changes in terms of trade between the pastoral products and other goods are seen to affect patterns of specialization.

Charles R. Lane. (ed.) 1998. *Custodians of the Commons: Pastoral Land Tenure in East and West Africa. Earthscan Publication Ltd., London.*

Custodian of the Common is a collection of case studies that attempt to explain the importance of pastoralism in the countries in which it is practiced. It addresses questions such as: Is pastoralism a dying tradition? Is it obsolete, inefficient and environmentally damaging? Should pastoralists of Africa be persuaded to settle down and engage in activities more relevant to the economic realities of the 21st Century? Different experts on pastoralism answer these questions in the negative and proceed to show how pastoralism is the only production system appropriate to the drylands of East and West Africa and their sustainability.

Charles Lane (1996). *Pastures Lost. Barabaig Economy, Resource Tenure, and the Alienation of their Land In Tanzania. Initiative Publishers, Nairobi, Kenya.*

This book explains the rationale of pastoralism and challenges the misconceptions about pastoralists being irrational hoarders of livestock with land tenure systems structurally incapable of efficient land use, using the Barabaig of Northern Tanzania as a case study. It interrogates the wisdom of large-scale wheat farming that alienated much of the land of the Barabaig, leading not only to greater vulnerability for the community but also to environmental degradation.

**Civil Society Pastoral Task Force. *Strategizing for Inclusion of Pastoralists Concerns in the PEAP. Pastoralist Analysis workshop, July 28 – 29, 2003. Nile Resort, Jinja Uf TD -0.0377 stort0421 T*
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unproductive. The PEAP 2004 provides a strategic entry point for addressing the historical bias against pastoralism.

Muhereza, F. E. *Economic contribution of Pastoralism in Uganda: An Assessment. Unpublished report. RECONCILE/IIED. September 2004.*

This report reviews economic data to help understand the complex nature of the economic contribution of pastoralism in Uganda. The economic contribution is assessed using available national statistics, mainly GDP and export revenue earning.

Nyariki, DM. *The Contribution of pastoralism to the local and national Economies in Kenya. A report for RECONCILE&IIED.*

This study establishes the contribution of pastoralism to the local and national economies in Kenya by exploring the nature and the degree of the contribution and the extent to which the existing policies can help in improving the economic contribution of pastoralism in the economy.

Peter D. Little, Kevin Smith, Barbara A. Cellarius, D. Layne Coppock and Christopher B. Barrett. *Avoiding Disaster: Diversification and Risk Management among East African Herders.*

This article addresses the processes of livelihood diversification among the pastoralists in the rangelands of northern Kenya and Southern Ethiopia. It looks at income diversification among the pastoralists with reference to the current literature and databases and presents a case study on pastoral income diversification based on preliminary field researches and shows how comparative analyses in the region have been constrained by theoretical and data deficiencies. The article explores ways in which income diversification differs by what are termed conditional, opportunity, and local response variables.

Republic of Tanzania. *The National Livestock Policy (Final Draft). Government of Tanzania. 2004.*

This policy provides the vision, mission and objective of the government in so far as the livestock matters are concerned. It identifies the problems in the livestock sector and proffers solutions.

Y. Ahmad. *The socio-economics of pastoralism: a commentary on changing techniques and strategies for livestock management.*

This is wide-ranging essay and deals with nomadic pastoral in the past and present. The author argues the case for programme and policy interventions that are multi-disciplinary, process-driven and focused on a minimum threshold of critical objectives

Yacob Aklifu, Patrick Irungu and Alemayehu. *An Audit of the livestock Marketing Status in Kenya, Ethiopia and Sudan. Vol.1 and II. PACE. April 2002.*

In this work market development is appreciated as a key factor in ensuring success of other development programs in pastoral areas. The study focuses on Kenya, Ethiopia and Sudan where marketing constraints and recurring droughts are adversely impacting on the livelihoods of pastoralists. The study seeks a better understanding of how existing ms. The study seeks 4 Tc h7

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