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LAND TENURE CENTER SPECIAL BIBLIOGRAPHY

THE SOCIO-ECONOMIC ASPECTS OF PASTORALISM AND LIVESTOCK DEVELOPMENT  
IN EASTERN AND SOUTHERN AFRICA :  
AN ANNOTATED BIBLIOGRAPHY

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There are few development issues today which entail a greater complexity of sociological, economic and ecological variables than that of livestock development in sub-Saharan Africa.\* The literature abounds with examples illustrating the tightly interwoven relationship between these factors in pastoral societies, as well as the unsuccessful development efforts which have been aimed at altering these systems. Nevertheless, there are very few guides to the literature on pastoralism which are available to individuals working on livestock development in sub-Saharan Africa. In especially, this applies to the pastoral regions of Eastern and Southern Africa.

The annotated bibliography which follows is an attempt to bring together the available sources on the socio-economics of pastoralism and livestock development in Eastern and Southern Africa. It is by no means, however, comprehensive, although I feel that most of the important works are included. In order to avoid too great a task, some important topics such as range management and animal production have not been considered. It is suggested for those individuals interested in the range management and animal production aspects of livestock development to refer to the bibliography in D.J. Pratt and M.D. Gwynne's, Rangeland Management and Ecology in East Africa, 1977.

A conscious effort was made to divide the literature on Eastern and Southern African pastoralism into logical, easily recognizable units. The categories I have chosen, Sudan Pastoralism (Sudan), Pastoralism on the African Horn (Eastern Ethiopia, Somalia, and Northeast Kenya), Rift Valley (and Neighboring Regions)

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\* The views expressed are those of the author and should not be taken to represent the viewpoint of AID or LTC.

Pastoralism (Southwestern Ethiopia, Northwestern and Southern Kenya, Tanzania, and Uganda), and Southern African Pastoralism (Zambia, Botswana, Lesotho, and Swaziland), represent particular geographical regions where, although economic and ecological factors vary considerably within the regions and many of the characteristics of one region can be found in another, each region taken as a whole can be distinguished from other regions in regard to certain economic and ecological criteria. For example, it is worthwhile to distinguish between the nomadic economies of the Sudan and African Horn and the pastoral systems which exist in the less arid areas of the Rift Valley region and Southern Africa. Similarly, it is important to recognize that pastoralism in the Rift Valley region and in certain parts of Southern Africa (i.e., Lesotho) tends to be much more vertically oriented (i.e., transhumance movements between hills and valley) than the systems of the African Horn where livestock movements tend to be much more horizontal (i.e., movement of livestock over areas where there is not a sharp distinction in environmental gradients). It should be remembered that these categories do not represent ideal types.

I. GENERAL WORKS

Abercrombie, F.D.

1974 Range Development and Management in Africa. Washington, D.C.: AID.

Although it is a little too general, this book nevertheless provides a good insight into the donor community's perceptions of range management in Africa in the early 1970s. A good deal of attention is devoted to range management problems in East Africa.

Baker, Randall

1974 Perceptions of Pastoralism. Occasional Paper, Institute for Development Studies, University of East Anglia, England.

The author has had considerable experience in livestock development work in East Africa and in this paper he presents a number of the misconceptions about pastoralists which are commonly held by development specialists. In particular, the author attempts to show that the assumption of pastoralist irrationality is incorrect.

Dalby, D., R.J. Harrison-Church and F. Bezzaz, eds.

1977 Drought in Africa. London: International African Institute.

Although the articles in the book are mainly concerned with the Sahelian drought of the early 1970s, many of the problems discussed are relevant to the Eastern and Southern African situation.

Dasmann, R., J. Milton and P. Freeman

1973 Ecological Principles for Economic Development. London: Wiley and Sons.

This book presents some of the socio-economic problems which are commonly thought to impede livestock development in Eastern and Southern Africa. In especially, the authors adopt the "tragedy of the commons" position; that is, the communal tenure system of the pastoralists leads to ecological degradation because individual pastoralists are not held responsible for the grazing habits of their animals.

Clantz, M., ed.

1977 Desertification. Boulder, Colorado: Westview Press.

Of the many articles in this book, the one which is of particular concern to Eastern and Southern African pastoralism is H. Were's "Desertification and Population: Sub-Saharan Africa". In addition to discussing such pastoral responses to population pressure (both human and livestock) as the cutting of trees for small stock fodder in the Sudan, the author argues that more micro-economic studies need to be made to determine how pastoralists adjust resource allocation in the face of increasing demographic pressure.

Goldschmidt, W.

1975 A National Livestock Bank: An Institutional Device for Rationalizing the Economy of Tribal Pastoralists. International Development Review 17: 2-6.

The author explores the possibility of a livestock bank in which the pastoralists are expected to deposit their cattle in return for tokens which are readily redeemable. Goldschmidt believes that this will both be acceptable to the pastoralists and reduce grazing pressure. However, since the proposed bank does not allow for interest it does not seem likely that it would be very appealing to the pastoralists. Pastoralists are able to earn up to 20% in interest annually from the reproduction of their herds.

Hare, K., R. Kates and A. Warren

1977 The Making Of Deserts: Climate, Ecology and Society. Economic Geography 53: 322-346.

Included in this article is a discussion of some of the social responses to desertification, e.g., migration. In addition, there is also an examination of human population growth rates in pastoral areas.

Hjort, A. and G. Dahl

1976 Having Herds. Stockholm: Liber Tryck.

No study of pastoralism has ever included such a large amount of data on indigenous livestock production in Africa as Hjort and Dahl's work. Included is an innovative simulation model which tries to show the relationship between herd size and human population.

Konczacki, Z.A.

1978 The Economics of Pastoralism. London: Cass.

This book is one of the first attempts by an economist to examine African pastoralism. While it does not appear

to reveal much that is new, there are some very useful chapters on livestock development in Somalia and Botswana.

Lawton, R.M.

1976 State of Knowledge Report on Tropical Grazing Land Ecosystems of Anglophone Africa. Land Resources Division, Ministry of Overseas Development, Surrey, England.

Although the primary purpose of the work is to examine the physical aspects of grazing land ecosystems, there is some worthwhile discussion of the socio-economic aspects of pastoralism.

Lele, Uma

1975 The Design of Rural Development: Lessons from Africa. Baltimore: John Hopkins University Press.

The author is a noted World Bank economist who has had considerable research experience in Eastern Africa. Because of this, she is able to provide an "insider's" view of some of the World Bank's livestock development projects, i.e. the Kenya Livestock Development Project. Regarding livestock development, her conclusion is that "livestock development involves a complex interaction of technical, economic, and socio-cultural factors, leading to considerable uncertainty as to the response to innovations" (p.56).

Livingstone, Ian

1977 Economic Irrationality Among Pastoral Peoples in East Africa: Myth or Reality? Discussion Paper No. 245, Institute for Development Studies, University of Nairobi, Nairobi, Kenya.

Livingstone looks at an old debate in the study of African pastoralists: whether or not they are rational or irrational. He concludes that, given the technical and ecological parameters of the system in which they operate, most pastoralists can be considered to act in a rational manner.

Mason, I. and J. Maule

1960 The Indigenous Livestock of Eastern and Southern Africa. Technical Communication No. 14 of the Commonwealth Bureau of Animal Breeding and Genetics. Farnham Royal, England.

While the book is primarily concerned with the physiological and production aspects of livestock, no bibliography of Eastern and Southern African pastoralism could be considered complete without it.

- Monod, T., ed.  
1975 Introduction. In Pastoralism in Tropical Africa. T. Monod, ed. London: Oxford University Press.

Monod's work emerged as a result of a livestock conference held in Niamey in the early 1970s. This introductory chapter mainly concentrates on the ecological aspects of pastoralism and gives little attention to socio-economic issues related to pastoralism. Nevertheless, it provides a good introduction to some of the ecological arguments which provide the basis for many livestock development projects (i.e., desertification in Africa has occurred because the pastoralists have overgrazed the rangelands).

- Rapp, A., N. Le Houerou and B. Lundholm, eds.  
1976 Can Desert Encroachment be Stopped? Stockholm: Swedish Natural Science Research Council.

In regard to Eastern and Southern African pastoralism, particular attention should be given to Hjort's two articles, "Traditional Land Use in Marginal Drylands" and "Constraints on Pastoralism in Drylands". In the former article, he suggests that "many pastoral peoples seem to have chosen dry areas not because they are 'left over' but because animal diseases are less common there (maybe also human diseases)"; while in the latter article he argues that overgrazing has been created by the fact that farmers have increasingly taken over the pastoralists' dry season grazing areas.

- Ruthenberg, Hans  
1971 Farming Systems in the Tropics. Oxford: Clarendon.

The author, a noted agricultural economist, examines some of the changes which are presently taking place in pastoral Africa. This includes the development of group ranches in East Africa, the loss of traditional markets for pastoralists to purchase grain and the disruption of indigenous transhumance patterns.

- Schneider, Harold K.  
1964 A Model of African Indigenous Economy and Society. Comparative Studies in Society and History 7: 37-55.

This article is the first attempt by a social anthropologist to analyze pastoral social organization in relation to economic variables. The author, through a comparison of numerous Eastern and Southern African societies, shows how marriage patterns, social organization, etc. varies in relation to the amount of livestock a society possesses.

Schneider, Harold K.

1979 Livestock and Equality in East Africa: The Economic Basis for Social Structure in East Africa. Bloomington, Ind.: Indiana University Press.

The author has defined East Africa to include parts of the Sudan, Ethiopia, Somalia, Burundi, Rwanda and the whole of Kenya, Tanzania and Uganda. In this book, Schneider argues that because of the growth potential (herd growth) in pastoral societies opportunity is more widespread than in agricultural societies and because of this pastoral societies are less likely to have institutionalized dependency relationships (i.e., chieftainships). This thesis is also presented in relation to current development activities in the livestock regions of East Africa.

United Nations

1977 Conference Papers on Desertification. Nairobi, Kenya.

These papers were published as a result of an international conference held in Nairobi in 1977. Many of the papers are concerned with African pastoralism.

Widestrand, C.G.

1975 The Rationale of Nomad Economy. *Ambio* 4: 146-153.

Widestrand has had considerable development experience in East Africa. In this paper, he relies heavily on Brown's (1971) work on pastoral subsistence and suggests that because of subsistence constraints pastoralist need to keep very large herds. Similar to most works focusing on this theme, Widestrand fails to recognize the possibility that pastoral societies are heavily engaged in exchange relationships with agricultural societies.

## II. SUDAN PASTORALISM

Ahmed, A.G.M.

- 1972 The Rufa 'a al-Hoj Economy. In Essays in Sudan Ethnography. I. Cunnison, ed. London: C. Hurst and Co.

Written by the leading Sudanese social anthropologist, the paper examines resource allocation in a semi-pastoral society. In short, the author concludes that "a nomad strives for the best allocation of all possible resources his environment provides" (p.174). In the case of the Rufa 'a al-Hoj, this leads to a mixed economy.

- 1973 Nomadic Competition in the Funj Area. Sudan Notes and Record and Records 54: 43-56.

Ahmed looks at pastoralist/agriculturalist conflicts over land in the Southern Sudan. Current government policy has disrupted the indigenous pastoral system in that it has increasingly allocated land to farmers which means that pastoralists who have lost their herds can no longer acquire agricultural land.

- 1973 Tribal and Sedentary Elites: A Bridge Between Two Communities. In The Desert and the Jown: Nomads in the Wider Society. Research Series No. 21, Institute of International Studies, University of California, Berkeley. C. Nelson, ed.

In this paper, the author looks at relationships between nomads and sedentary populations in the Funj area of the Southern part of Gezira. Particular attention is devoted to the role of elites as middlemen in interactions with both the sedentary population and the modern government.

- 1974 Shaykhs and Followers: Political Struggle in Rufa 'a al-Hoj Nazirate in the Sudan. Department of Social Anthropology, University of Bergen.

Although this monograph is mainly concerned with political power struggles in a rapidly changing pastoral society, the book provides one of the finest discussions of the pastoral domestic economy in the Sudan. The author shows how recent changes such as the loss of traditional grazing lands and the emergence of absentee landlordism have made the pastoralists very resentful.

Asad, Talal

- 1964 Seasonal Movements of the Kababish Arabs of Northern Kordofan. Sudan Notes and Records 45: 48-58.

The author identifies two goals of this paper: (1) "to provide a descriptive account of the seasonal movements of the pastoral Kababish" and (2) "to stress the rational character of Kababish decisions relating to the utilization of environmental resources" (p.48).

1970 The Kababish Arabs: Power, Authority and Consent in a Nomadic Tribe. New York: Praeger.

One of the finest analysis of a Sudanese pastoral society which is operating within the political boundaries of a highly stratified state organization.

Asad, Talal, I. Cunnison and H. Hill  
1966 Settlement of Nomads in the Sudan: A Critique. In Agricultural Development in the Sudan, Vol. I. Khartoum: Philosophical Society of the Sudan.

The theme of this paper is that the pastoral way of life is the most rational adaptation to Sudan's semi-arid and arid lands and therefore settlement schemes involving nomads are bound to fail.

Butt, A.  
1952 The Nilotes of the Anglo-Egyptian Sudan and Uganda. London: International African Institute.

Included in this work are brief ethnographic descriptions of the Nuer, Dinka, Acholi, Luo, Shilluk, Lango, Burun and Alur.

Cunnison, I.  
1954 The Humr and Their Land. Sudan Notes and Records 35: 50-68.

An excellent survey of Dar Humr: resources, people, diet, economy, etc. Among the substantive issues discussed are pastoral transhumance and land tenure.

1966 Baggara Arabs: Power and Lineage in a Sudanese Nomad Tribe. London: Oxford University Press.

This monograph provides an excellent analysis of the social organization (i.e., political) of the Baggara Arabs of southwest Kordofan. Included is a good description of the Baggara pastoral economy.

1972 Essays in Sudan Ethnography. London: Hurst.

Included in this anthology, are papers by some of the leading pastoralist specialist in the Sudan, e.g.,

Asad, Cunnison and others.

Jafalla, Hasan

1975 The Nubian Exodus. Khartoum: Khartoum University Press.

The Aswan Dam in southern Egypt affected many pastoralists, directly and indirectly, in the northern Sudan. This book provides a unique story of the resettlement of 50,000 Sudanese in that it was written by one of the administrators who participated in the project.

Deng, F.M.

1972 The Dinka of the Sudan. New York: Holt, Rinehart and Winston.

1971 Tradition and Modernization: A Challenge for Law Among the Dinka of the Sudan. New Haven: Yale University Press.

1978 Africans of Two Worlds: The Dinka in Afro-Arab Sudan. New Haven: Yale University Press.

The author of these three books is both an experienced administrator and social anthropologist. This unique combination of skills allows the author to present a comprehensive analysis of a pastoral society, the Dinka, which is highly useful to development specialists.

el Arifi, S.E.

1974 A New Approach to Planning and Development for the Pastoral Nomads of the Sudan. In Manpower Planning and Development. Proceedings of the 18th Annual Conference of the Philosophical Society of the Sudan. E.S. Abdalla, Yacoub, ed. Khartoum: Philosophical Society of the Sudan.

A brief review of current government policy towards pastoralists in the Sudan.

Gillespie, I.A.

1966 The Nomads of the Sudan and Their Livestock in the Twentieth Century. Sudan Journal Of Veterinary Science and Animal Husbandry 7: 13-23.

A good background document for studying some of the changes which have occurred in the Sudan in the twentieth century.

Graham, A.

1969 Man-Water Relations in the East Central Sudan. In

Environment and Land Use in Africa. M. Thomas and G.W. Whittington, eds. London: Methuen.

The author shows the relationship between human population settlements and water distribution in a livestock region of the Sudan.

Haaland, Gunnar

1969

Economic Determinants in Ethnic Processes. In Ethnic Groups and Boundaries. F. Barth, ed. Boston: Little and Brown and Co.

This article demonstrates the dynamic relationships which exist between agriculturalists and pastoralists in Darfur, Sudan. Similar to many pastoral groups in West Africa, the Baggara pastoralists herd the cattle of the sedentary group in Darfur. As Haaland reveals, in cases where a farmer from Fur has accumulated enough livestock they often cross ethnic boundaries and become incorporated into Baggara communities. In short, because of the potential economic gain in the pastoral sector, the wealthiest farmers become pastoralists.

1972

Nomadism as an Economic Career Among the Sedentaries of the Sudan Savannah Belt. In Essays in Sudan Ethnography. I. Cunnison, ed. London: C. Hurst and Co.

Similar to Haaland's earlier works, this essay examines the "nomadization" of sedentary Fur. He argues, however, that investments in the pastoral sector are related to macro-ecological considerations. That is to say, a regional ecological balance is maintained because as more people enter into the pastoral sector, there are processes at work (e.g., overgrazing, drought, etc.) which continually force pastoralists out of a pastoral livelihood and into the agricultural sector. Thus, there is a continual flow of people back and forth between the pastoral and agricultural sectors.

1977

Pastoral Systems of Production. In Landuse and Development. P. O'Keefe and B. Wisner, eds. London: International African Institute.

Given the lack of investment alternatives in many pastoral regions of the Sudan, the author argues that it is perfectly rational for the pastoralist to continue to invest in livestock. To quote Haaland (p. 181): "The only growth possibility is to invest in the pastoral sector, animals are the only factor of production which is monetized".

Holy, Ladislav

1974 Neighbours and Kinsmen: A Study of the Berti People of Darfur. London: Hurst.

Although the group studied is more involved with cultivation as opposed to pastoralism, the book provides a detailed analysis of the village-level domestic economy in Darfur, Sudan.

Hoyle, Steven

1977 The Khashm el Girba Agricultural Scheme: An Example of an Attempt to Settle Nomads. In Landuse and Development. P. O'Keefe and B. Wisner, eds. London: International African Institute.

Hoyle examines the reasons why efforts by the Sudan government to settle pastoralists on agricultural schemes (i.e., Khashm el Girba) have failed to prevent the pastoralists from continuing to invest in livestock. In the particular scheme under study, the Khashm el Girba, the pastoralists have found that it is more profitable to continue to keep livestock rather than invest all their capital into agricultural production.

Khalifa, A.H. and Morag C. Simpson

1972 Perverse Supply in Nomadic Societies. Oxford Agrarian Studies 1: 46-56.

With time-series data from the Western Sudan, the authors construct an econometric model to show that pastoralists in the Western Sudan do regulate the sale of their cattle in response to price variations. The paper is clearly unique in that it is one of the first attempts to empirically test the hypothesis of a perverse supply response in nomadic societies.

Khalili, I.M.

1960 Developing the Animal Wealth of the Sudan. Sudan Notes and Records 41: 6-20.

The author presents a macro-survey of Sudan's livestock sector showing the great potential for development.

Lewis, B.A.

1972 The Murle. Oxford: Clarendon.

Written very much in the British social anthropological tradition, the author describes the social organization of a pastoral group from the Southern Sudan.

Mohammed, Abbas

1973

The Nomadic and the Sedentary: Polar Complementaries-Not Polar Opposition. In The Desert and the Sown. C. Nelson, ed. Research Series No. 21, Institute of International Studies, University of California, Berkeley.

This paper is concerned with the Rahawat Scheme in the White Nile Area, Sudan. The author suggests that a symbiotic relationship exists between the neighboring nomads and the farmers on the scheme in that the off-season surplus labor from the pastoral society can be absorbed by the scheme in the form of cotton pickers. The key to the relationship is that the peak seasonal demands on labor do not occur at the same time of the year in both societies.

Mustafa, A.A. and M.T. Fawi

1966

Control of Disease as Prerequisite to Development. Sudan Journal of Veterinary Science and Animal Husbandry 7: 46-73.

This is a convincing argument showing that the development of Sudan's livestock sector is dependent upon the eradication of indigenous livestock diseases.

Republic of Sudan

1972

Proceedings of the Relief and Resettlement Conference on the Southern Region. Khartoum: Ministry of State for Southern Affairs.

This work outlines some of the views of the Sudan government towards livestock development. The general consensus of the conference members is illustrated well in the following quote: "It was impressed upon us that there is in the livestock of the South, both domestic and wild resources of great wealth alongside a people living in comparative poverty, because they have not the techniques and modern know-how to exploit this wealth" (p. 9).

Saeed, A.B.M.

1971

The Savanna Belt of the Sudan: A Case Study. Khartoum: Ministry of Cooperation and Rural Development.

The author argues that the major impediment to development in the semi-arid regions of the South Western Kordofan Province is overgrazing of livestock. To counteract this tendency, the author suggests that livestock numbers be radically reduced and that some form of rotational grazing be introduced.

Sorbo, G.M.

- 1977 How to Survive Development: The Story of New Halfa. Khartoum Development Studies and Research Centre, Faculty of Economics and Social Studies, Monograph No. 6, University of Khartoum.

A good example of how members of agricultural schemes often invest in non-scheme activities so as not to depend solely on the scheme for their income.

- 1977 Nomads on the Scheme-a Study of Irrigation Agriculture and Pastoralism in Eastern Sudan. In Landuse and Development. P. O'Keefe and B. Wisner, eds. London: International African Institute.

Despite efforts to settle pastoralists in the Eastern Sudan, the pastoralists of the area are still investing in livestock even after they have become members of an irrigation scheme. Similar to other works on pastoralism in the Sudan, the author shows that there is greater potential for economic growth in the pastoral sector than there is in agriculture.

Wilson, R.T. and Clarke, S.E.

- 1975 Studies on the Livestock of Southern Darfur, Sudan. I. The Ecology and Livestock Resources of the Area. Tropical Animal Health Production 7: 165-187.

This is the first paper in a series which R.T. Wilson has published in Tropical Animal Health Production. Other papers on related subjects appear in subsequent issues. Although the article does not deal directly with socio-economic issues, it provides an excellent background for development work in the area.

- 1977 Temporal Changes in Livestock Numbers and Patterns of Transhumance in Southern Darfur, Sudan. Journal of Developing Areas 11: 493-508.

In addition to showing the transhumance patterns of pastoralists in Southern Darfur, Wilson presents a diachronic study revealing the steady growth of herds in Darfur over the past century. Concerning the latter phenomenon, he notes: "By 1972 an excessive number of animals were struggling for survival on a limited and declining resource base...Cattle numbers can be expected to decrease in future years, mainly as a result of the continuation of poor reproductive levels and high death rates" (p. 504).

III. PASTORALISM ON THE AFRICAN HORN (Northeast Kenya, Somalia and Eastern Ethiopia)

Abeles, Marc

- 1979 Generations et Royaute Sacree Chez les Galla d'Ethiopie. In Pastoral Production and Society. L'Equipe Ecologie et Anthropologie des Societes Pastorales, ed. Cambridge: Cambridge University Press.

In addition to analyzing the political system of the Oromo of Ethiopia, the author shows how the group has been expanding territorially in the past century. This region represents one of Ethiopia's largest livestock areas.

Baxter, P.W.

- 1975 Some Consequences of Sedentarization for Social Relationships. In Pastoralism in Tropical Africa. T. Monod, ed. London: Oxford University Press.

The paper is based on the assumption "not only that a relationship between pastoral and sedentary peoples is usual, but also that a process of sedentarization is a frequent feature of pastoralism rather than a falling away from an ideal, or idealized, form of pastoralism." Importantly, Baxter points to the fact that the sedentarization of pastoralists in Northeastern Kenya is breaking down the egalitarian nature of the pastoral social structure.

Box, T.W.

- 1971 Nomadism and Land Use in Somalia. Economic Development and Culture Change 19: 222-228.

In short, the author argues "that under the ecological and economic conditions now existing in Somalia, nomadic use of the land is the best utilization of the resource" (p. 225).

Dahl, Gundren

- 1979 Ecology and Equality: The Borana Case. In Pastoral Production and Society. L'Equipe Ecologie et Anthropologie des Societes Pastorales. Cambridge: Cambridge University Press.

Through an analysis of Borana pastoralism (Northeastern Kenya), Dahl emphasizes the importance of ecological factors in explaining the egalitarian social structure of pastoral societies.

Harbeson, John W.

1975 Afar Pastoralists and Ethiopian Rural Development. Rural Africana 28: 71-85.

1978 Territorial and Development Politics in the Horn of Africa: The Afar of the Awash Valley. African Affairs 77: 479-498.

Studies of pastoralism by political scientists are rare. These two papers were written by a political scientist who spent three years in Ethiopia in the early 1970s. Harbeson's articles, which take into account both micro- and macro-political considerations, emphasizes the disputes the pastoralists of Northeastern Ethiopia have had with the Ethiopian government over the land in the Awash valley. As he points out, the loss of grazing land has reduced the viability of the Afar pastoral system.

Hultin, Jan

1979 Political Structure and the Development of Inequality Among the Macha Oromo. In Pastoral Production and Society. L'Equipe Ecologie et Anthropologie des Societes, ed. Cambridge: Cambridge University Press.

The article describes the political system of the Oromo of Southeastern Ethiopia. The emergence of war leaders and local leaders in the past century has led to increased inequality in the society.

Karp, Mark

1960 The Economics of Trusteeship in Somalia. Boston: Boston University Press.

Included in this work, is a discussion Somalia's livestock sector.

Legesse, A.

1973 Gada: Three Approaches to the Study of an African Society. New York: Free Press.

The book is concerned with the social structure of the Borana of Northeastern Kenya. Although the book is a bit complex (theoretically), it is the most complete account of Borana society available.

Lewis, I.M.

1961 A Pastoral Democracy. London: Oxford University Press.

1962 Lineage Continuity and Modern Commerce in Northern Somaliland. In Markets in Africa. P. Bohannan and G. Dalton, eds. Evanston: Northwestern University Press.

1962 **Marriage and the Family in Northern Somaliland.** East African Studies No. 15. Kampala: East African Institute of Social Research.

1975 **The Dynamics of Nomadism: Prospects for Sedentarization and Social Change.** In Pastoralism in Tropical Africa. T. Monod, ed. London: Oxford University Press.

These works are the product of intensive micro-level research by the foremost specialist of Somali pastoralism. In the first three works, Lewis introduces the reader to Somali economy and society. In particular, he is concerned with relating the demands of a pastoral economy to social organization (e.g., political, kinship, etc). The latter work deals more directly with development issues. In this paper, the author argues that for development to occur "economic factors have to be set and presented in such a fashion as to promote settlement by demonstrating that it is a paying proposition, where this is in fact the case and this is a realistic policy" (p. 437).

1975 **Abaar: The Somali Drought.** London: International African Institute.

The book is concerned with some of the socio-economic problems which emerged in Somalia as a result of the 1970s drought.

Marlowe, David H.

1963 **The Galjaal Barsana of Central Somalia: A Study of the Relationship Between Socio-Political Change, Inter and Intra Group Conflict and Political and Social Behavior.** Ph.D. dissertation, Harvard University.

Although the book is mainly concerned with political organization, Marlowe presents a detailed analysis of the Barsana pastoral economy.

Ruebel, P.G.

1969 **Herd Composition and Social Structure: On Building Models of Nomadic Pastoral Societies.** Man 4: 268-273.

Through a comparison of Somali pastoralism with Middle Eastern pastoralism, Ruebel relates different social organizational forms to variations in herd composition (goats, sheep and camels).

Swift, J.

1977 **Pastoral Development in Somalia: Herding Cooperatives as a Strategy Against Desertification.** In Desertification. M. Glantz, ed. Boulder, Colo.: Westview Press.

Swift argues that there is a fundamental difference between traditional pastoralism and the type of livestock production the Somalia government is proposing: "This potential contradiction is highlighted by the fundamental difference between the objective of a traditional pastoral economy, which is to support a large number of people with an acceptable safety margin against disaster, and the objective of a modern high-productivity animal production operation such as a ranch, which is to market the maximum quantity of milk or meat, and which requires as few people as possible competing with the calves for milk, or consuming part of the lamb or calf surplus" (p. 289).

1979 The Development of Livestock Trading in a Nomadic Pastoral Economy: The Somali Case. In Pastoral Production and society. L'Equipe Ecologie et Anthropologie des Societes Pastorales, ed. Cambridge: Cambridge University Press.

This is one of the few articles that presents time-series data to show that pastoralists are experiencing deteriorating "terms of trade" with agriculturalists. As Swift points out, the price the Somali pastoralist receives for his products **has declined relative to the price of grain.**

IV. RIFT VALLEY (AND NEIGHBORING REGIONS) PASTORALISM (Southwestern Ethiopia, Northwestern and Southern Kenya, Uganda and Tanzania)

- Aldington, T.J. and F.A. Wilson  
1968 The Marketing of Beef in Kenya. Occasional Paper No. 3, Institute for Development Studies, University of Nairobi.

This work still represents the most comprehensive study to date on livestock marketing in Kenya. Included are invaluable statistics on off-take rates, inter-district movement of livestock and urban demand for beef.

- Almagor, Uri  
1977 Pastoral Partners: Affinity and Bond Partnership Among the Dassanetch of South-West Ethiopia. Manchester: Manchester University Press.

Almagor examines the role of stock associateships in Dassanetch society. The book clearly demonstrates that any livestock development project in East Africa which does not pay particular attention to the role of stock-loaning is likely to encounter severe difficulties.

- Anthony, K. and Victor Uchendu  
1974 Agricultural Change in Geita District, Tanzania. Nairobi: East African Publishing House.

Geita District is located in Northwestern Tanzania and has been inhabited by the Sukuma since the 1930s when the area was cleared of Tsetse fly. Although the area is today one of the largest cotton-producing regions in Tanzania, livestock still remains important in the local economy. In especially, the book provides some important insights into a pastoral economy which is far more sedentary than most pastoral economies.

- 1975 Agricultural Change in Teso District, Uganda. Nairobi: East African Literature Bureau.

More than any other pastoral society in Uganda, the Teso have been able to incorporate commercial agriculture (i.e., cotton cultivation) into their economy without drastically altering their pastoral way of life. As the authors reveal, the Teso still feel that livestock is an important commodity to invest in.

- 1975 Agricultural Change in Kisii District, Kenya. Nairobi: East African Literature Bureau.

The book examines some of the changes which are occurring in the highland livestock economies of Kenya. In particular, the favorable rainfall and soil conditions has led to increased emphasis on cash crops (e.g., tea and coffee), as opposed to livestock, in Kisii, Kenya.

Baker, Randall

- 1968 Problems of the Cattle Trade in Karamoja, Uganda: An Environmental Analysis. *Ostafrikanische Studien* 8: 211-226.

The article discusses livestock marketing in a pastoral region of Uganda where the cfttake-rate is very low, i.e., 3.4%. From a fairly extensive sample base, the author shows that the pastoralists in the area are reluctant to sell animals which are not either old or sickly.

- 1975 'Development' and the Pastoral Peoples of Karimojong, Northeastern Uganda. *In Pastoralism in Tropical Africa*. T. Monod, ed. London: Oxford University Press.

Baker emphasizes the importance of climatic variables in the marketing of livestock in pastoral areas. In Karimojong, he found that: "Where cattle sales were attempted the problem arose from the fact that the buyers required a regular supply of beef steers related to the pattern of demand for quantity and quality while the sellers responded predominantly to the dictates of the weather" (p. 198).

- 1977 Polarisation: Stages in the Environmental Impact of Alien Ideas on a Semi-Pastoral Society (Karimojong). *In Land-use and Development*. P. O'Keefe and B. Wisner, eds. London: International African Institute.

In addition to presenting a short history of donor efforts (AID, IBRD and FAO) in Karimojong, Northeastern Uganda, Baker identifies some of the factors which have led to the present state of environmental degradation in Karimojong. These include the expansion of cotton cultivation into traditional pastoral areas, the restriction of transhumance patterns and the non-systematic building of wells in the region.

Baldus, Rolf D.

- 1977 The Introduction of Cooperative Livestock Husbandry in Tanzania. *Land Reform*, No. 2, FAO.

The author examines some of the issues involved with the development of ranching associations in Tanzania.

Brown, Leslie n.

- 1971 The Biology of Pastoral Man as a Factor in Conservation. *Biological Conservation* 3: 93-100.

Until the recent work of Dahl and Hjort (1976), this important article had been almost totally neglected by pastoral specialists. In the paper, the author shows that herd size in pastoral societies is determined by the size of the human population which must subsist on the products of the herd. Importantly, Brown recognizes that optimum herd size will vary according to the degree to which the pastoral population depends on agricultural products for its diet.

Bullock, R.A.

- 1975 Administrative Approaches to the Management of the Dry Margins of Kikuyuland, 1930-1970. *In* Drought, Famine, and Population Movements in Africa. Program of Eastern African Studies, No. 17, Syracuse University.

The author analyzes a semi-arid region of Central Kenya where because of population pressure the inhabitants have had to increasingly depend on cultivation, as opposed to livestock production. Because of this loss of grazing areas, the local people are now involved in a more risky enterprise given the semi-arid environment.

Campbell, David J.

- 1978 Coping with Drought in Kenya Maasailand: Pastoralists and Farmers of the Loitokitok Area, Kajiado District. Working Paper #337, Institute for Development Studies, University of Nairobi.

- 1979 Development or Decline: Resources, Land Use and Population Growth in Kajiado District. Working Paper #352, Institute for Development Studies, University of Nairobi.

Having worked with pastoralists in West Africa in the Sahelian drought years, Campbell brings to the study of East African pastoralism a regional perspective that is rarely found in the study of East African pastoral societies. The author emphasizes the serious condition which presently exists in Maasailand because of such things as the loss of dry season grazing areas and an increasing human population. These two papers are highly recommended for individuals concerned with livestock development in Kenya.

Cerrulli, F.  
1956 Peoples of South-West Ethiopia and Its Borderland.  
London: International African Institute.

The book contains a brief survey of the following Ethiopian ethnic groups: Konso, Didinga, Murle, Longarim and Burji.

Collinson, Michael P.  
1972 Farm Mangement in Peasant Agriculture. New York: Praeger.

The author presents some very useful methodological insights into doing micro-economic research in a mixed economy. The region concerned is Northwestern Tanzania.

Conant, F.P.  
1965 Korok: A Variable Unit of Physical and Social Space Among the Pokot of East Africa. American Anthropologist 67: 429-434.

Conant shows that the pastoral Pokot cannot be studied in isolation from the agricultural Pokot because of the degree of interdependence which exists between the two (i.e., trade and social interaction).

Davis, Robert K.  
1971 Some Issues in the Evolution, Organization and Operation of Group Ranches in Kenya. East African Journal of Rural Development 4: 22-33.

This is one of the first articles to deal with the issue of group ranches in Maasailand. Although it was written a little too early to adequately evaluate the schemes, the article nevertheless provides a good introduction to the subject.

Deshler, Walter  
1960 Livestock Trypanosomiasis and Human Settlement in Northeastern Uganda. Geographica. Review 50: 54-554.

Deshler analyzes the relationship between the fluctuating tsetse fly belt and human settlements in Northeastern Uganda.

1965 Native Cattle Keeping in East Africa. In Man, Culture and Animals. A. Leeds and A. Vayda, eds. Wash., D.C.: American Association for the Advancement of Science.

In this paper, Deshler suggests that in East African pastoral regions "social attitudes toward cattle are related to and may have arisen from subsistence or survival imperatives" (p. 154).

Doornbos, M.R. and M. Lofchie

1971 Ranching and Scheming: A Case Study of the Ankole Ranching Scheme. In The State of the Nation: Constraints on Development in Independent Africa. M. Lofchie, ed. Los Angeles: University of California Press.

The authors explore the ways in which a locally-based elite were able to take advantage of a large livestock development project in Southern Uganda.

Dyson-Hudson, N.

1966 Karimojong Politics. Oxford: Clarendon.

1970 Factors Inhibiting Change in an African Pastoral Society: The Karimojong of Northeast Uganda. In Black Africa. J. Middleton, ed. Toronto: Collier-Macmillan Canada, Ltd.

While the monograph (1966) introduces the reader to Karimojong pastoralism, the latter work argues that efforts to settle the Karimojong are bound to meet with resistance on the part of the pastoralists because the region's uncertain environment necessitates the movement of herds.

Dyson-Hudson, N. and V. Dyson-Hudson

1970 The Production System of a Semi-Nomadic Society: The Karimojong Society. In African Food Production Systems. P. McLoughlin, ed. Baltimore: John Hopkins University Press.

Included in this article are important data concerning milk production, calving rates, herd structure, etc in a pastoral economy.

Edgerton, R.B.

1971 The Individual in Cultural Adaptation. Los Angeles and Berkeley: University of California Press.

In the mid-1960s, Goldschmidt of UCLA headed a large-scale project in East Africa on culture and ecology. Edgerton's work is the most comprehensive summary of the team's results. In terms of pastoralism, the book contains some interesting data on the pastoral Pokot of Western Kenya, showing that the pastoral Pokot tend to be far more individualistic than the agricultural Pokot.

Eilam, Y.  
1973 The Social and Sexual Roles of Hima Women. Manchester:  
Manchester University Press.

The book examines the role of woman among a pastoral group of Southwestern Uganda.

FAO  
1967 East African Livestock Survey. Vols. I, II, and III.  
Rome: FAO.

Although the survey is a little outdated, it still represents the most comprehensive livestock census ever taken in East Africa. In addition, in this work is contained the FAO's strategy for developing the pastoral regions of East Africa.

Fumagalli, Carl T.  
1978 An Evaluation of Development Projects Among East African Pastoralists. African Studies Review 21: 49-63.

Fumagalli compares the Samburu livestock projects (Northern Kenya) with the group ranching schemes of Maasailand. His conclusion is that there is no traditional or geographical unit which can provide a basis for group ranching in Maasailand.

Galaty, John C.  
1978 The Maasai Group Ranch: Politics and Development in an African Society. Paper presented at the Xth International Congress of Anthropology and Ethnological Sciences, Delhi, India.

Having recently returned from field work in Maasailand, the author argues that it is doubtful that the group ranching approach will transform Maasai pastoralism into a commercial herding enterprise.

Glover, P.E. and Gwynne, M.D.  
1961 The Destruction of Masailand. New Scientist 24: 450-453.

The authors believe that conservation measures in Masailand should be immediately enforced. They blame the present environmental degradation on overgrazing by the Maasai because their grazing lands have been reduced, non-systematic drilling of wells and the burning of forest lands by the Maasai to create more grazing land.

Goldschmidt, W.

1972 The Operations of a Sebei Capitalist: A Contribution to Economic Anthropology. *Ethnology* 11: 187-201.

1976 Culture and Behavior of the Sebei. Los Angeles and Berkeley: University of California Press.

These two works are concerned with a semi-pastoral group from Eastern Uganda. While the latter work provides a general description of Sebei society and economy, the former work is a case study of one Sebei individual who through his own initiative was able to build up one of the largest herds in the region.

Goldsmith, Arthur

1977 Group Ranching Among the Masai. Rural Development Committee Paper, Cornell University.

Regarding group ranching in Kenya, the author suggests that the goals of increased productivity and equity are often hampered by "conflict of local interests, lack of coordination between government agencies, inadequate research and planning, and insufficient democratic control over decisions" (p. 1).

Gray, Robert

1959 The Sonjo of Tanganyika. Chicago: University of Chicago Press.

1962 Economic Exchange in a Sonjo Village. *In Markets in Africa*. P. Bohannan and G. Dalton, eds. Evanston: Northwestern University Press.

1964 Sonjo Lineage Structure and Property. *In The Family Estate in Africa*. R. Gray and P.H. Gulliver, eds. Boston: Boston University Press.

Gray's works on the Sonjo represent some of the only socio-economic research ever done on an African society which is predominantly involved in small ruminant production.

Gulliver, P.H.

1955 The Family Herds. London: Routledge and Kegan Paul.

Gulliver's work on the Turkana of Northern Tanzania is one of the finest studies of the sociology of pastoralism which has ever been done. The author's message is that in many pastoral societies the social unit of analysis should be the stock associate partnerships, as opposed to kinship groups or territorial units.

- 1968 Nomadism Among the Pastoral Turkana of Kenya: Its Natural and Social Environment. In Society and Social Change in Eastern Africa. P. Rigby, ed. Kampala: Makerere Institute of Social Research.

A good discussion of the transhumance pattern of the pastoral Turkana. This region is probably the most inaccessible pastoral area in all of Kenya.

- 1962 The Evolution of Arusha Trade. In Markets in Africa. P. Bchannan and G. Dalton, eds. Evanston: Northwestern University Press.

- 1969 The Conservative Commitment in Northern Tanzania: The Arusha and Masai. In Tradition and Transition in East Africa. P.H. Gulliver, ed. Berkeley: University of California Press.

These two works are products of Gulliver's Northern Tanzania research in the 1960s. The earlier article illustrates a phenomenon which is becoming increasingly widespread in Africa: the breakdown in trade relations between pastoralists and agriculturalists. Because of their recent prosperity in coffee production, the Arusha are becoming reluctant to continue their traditional grain/ livestock trade with the pastoral Maasai. The latter article looks at a different issue: the reasons why the Maasai and their neighbors have not responded to development efforts in the region.

- Gwynne, M. and W.T. Morgan  
1969 A Bibliography of the Turkana. Nairobi: Royal Geographical Society.

This bibliography of the pastoral Turkana of Northwestern Kenya is a good guide to the literature of the area.

- Halderman, John M.  
1972 An Analysis of Continuous Semi-Nomadism on the Kaputei Maasai Group Ranches: Sociological and Ecological Factors. Discussion Paper No. 152, Institute for Development Studies, University of Nairobi.

Despite the implementation of group ranches in Maasailand, the author reveals that the Maasai movement of livestock does not correspond to the boundaries of the ranches.

- Hankins, T.D.  
1974 Response to Drought in Sukumaland, Tanzania. In G.F. White, ed. Natural Hazards. New York: Oxford University Press.

Although the Sukuma region of Northwestern Tanzania is not one of the most arid areas of East Africa, the region still experiences periodical droughts. The article provides good data on the ways in which the Sukuma adjust to drought.

- Heady, H.F.  
1960 Range Management in East Africa. Nairobi: Government Printer.

An excellent introduction to range management in East Africa.

- Hedlund, H.G.  
1971 The Impact of Group Ranches on a Pastoral Society. Discussion Paper No. 100, Institute for Development Studies, University of Nairobi.

In addition to revealing that group ranches in Maasailand seem to have increased inequality in the region, Hedlund suggests that the Maasai only agreed to adjudicate their range land because they feared the agriculturalists or game parks might get control of the land.

- Henriksen, G.  
1974 Economic Growth and Ecological Balance: Problems of Development in Turkana. Occasional Paper No. 11, Institute for Social Anthropology, University of Bergen.

This paper should be required reading for development specialists who believe that local employment outside of the pastoral sector is one way to persuade the pastoralists to decrease the size of their herds. In Northwestern Kenya, Henriksen found that the introduction of a fishing industry on Lake Turkana has led to increased overgrazing in that the pastoralists are using the income earned from fishing to buy more livestock. In short, livestock are still the best investment alternative in the region.

- Hess, Oleen  
1976 The Establishment of Cattle Ranching Associations Among the Masai in Tanzania. Occasional Paper No. 7, Rural Development Committee, Cornell University.

The author examines the organization of ranching associations in Northern Tanzania.

Hoben, Allen

1976 Social Soundness of the Masai Livestock and Range Management Project. Washington, D.C.: AID.

Hoben points out that ranching associations in Maasailand which have tried to match territory with social organizational form have failed. This has resulted not because ranching associations are a bad idea, but more due to inadequate social science staffing, poor project coordination and the increasing competition for scarce resources in the Maasai plains.

Honadle, George and Richard McGarr

1979 Organizing and Managing Technical Assistance: Lessons from the Maasai Range Management Project. A Field Report prepared under AID Contract No. DSAN-C-0065.

The authors examine the organizational factors which have affected the implementation of the Maasai Project.

IBRD

1975 Kenya: Into the Second Decade. Baltimore: John Hopkins University Press.

Included in this World Bank summary, is a discussion of Kenya's livestock sub-sector.

Jacobs, A.H.

1973 The Pastoral Maasai of Kenya and Tanzania. In Cultural Source Materials for Population Planning. A. Molnos, ed. Nairobi: East African Publishing House.

1975 Maasai Pastoralism in Historical Perspective. In Pastoralism in Tropical Africa. T. Monod, ed. London: Oxford University Press.

The author has had considerable research experience with the Maasai and in these two articles he presents some of the factors which are affecting Maasai pastoralism today: (1) continued restriction of range area and (2) increasing human population.

Kaufmann, R. von

1976 The Development of Range Land Areas. In Agricultural Development in Kenya. J. Heyer, J.K. Maitha, and W.M. Senga, eds. Nairobi: Oxford University Press.

The author suggests that pastoralism in Kenya should be divided into (1) Sedentary pastoralism; (2) Migratory pastoralism; (3) Hill-adjacent pastoralism; (4) Large scale commercial ranching; and (5) pastoralism on unoccupied state lands.

Klima, G.J.

1970 *The Barabaig: East African Cattle Herders.* New York: Holt, Rinehart and Winston.

Klima describes the economy and social structure of a Central Tanzanian pastoral group.

Levine, R.A. and B.B. Lovine

1966 *Nyansongo: A Gusii Community in Kenya.* New York: Wiley.

Although the Gusii region has undergone rapid change in the past twenty years, "cattle are still regarded as the soundest form of investment for a man who has adequate pasturage" (p. 17).

Malcolm, D.W.

1953 *Sukumaland: An African People and Their Country.* London: Oxford University Press.

The author examines the role of cattle as capital among the Sukuma of Northwestern Tanzania.

Maloiy, G.M. and H.F. Heady

1965 *Grazing Conditions in Kenya Masailand.* *Journal of Range Management* 18: 269-272.

The authors suggest a number of recommendations for the development of Masailand: (1) improved marketing; (2) some development of ranching units; and (3) control of livestock numbers.

Mann, I.

1967 *The Organization of the Livestock and Meat Trade in Kenya.* Rome: FAO.

Included in this study are the FAO's recommendations for the development of Kenya's livestock market.

Manners, R.A.

1962 *Change with Alacrity: The Kipsigis of Kenya.* *In* *Markets in Africa.* P. Bohannan and G. Dalton, eds. Evanston: Northwestern University Press.

1967 *The Kipsigis of Kenya.* *In* *Three African Tribes in Transition.* J. Steward, ed. Urbana: University of Illinois Press.

Both of these works are concerned with the factors that have accounted for the great deal of change which has occurred in the Kipsigis economy. This is more adequately dealt with in the earlier paper where Manners' notes that the ready availability of agricultural markets in the highland area accounted for the Kipsigis change from pastoralism to mainly maize production.

- McCulloch, B.  
1965 Overstocking in Sukumaland, Tanganyika. East African Agricultural and Forestry Journal, Vol. 31.

The decline in the availability of range land has created the serious stocking condition which exists in Sukumaland.

- Meadows, S.J. and J.M. White  
1979 Structure of the Herd and Determinants of Offtake Rates in Kajiado District in Kenya, 1962-1977. Pastoral Network Paper 7d, Overseas Development Institute, London.

The authors attempt to explain variations in the supply of cattle in Kajiado, Kenya in terms of such factors as subsistence needs and climate.

- Merril, R.S.  
1960 Resistance to Economic Change: The Masai. Proceedings, The Minnesota Academy of Science 28: 120-131.

Although many areas of Maasailand are suited for agriculture, the author argues that the Maasai have not incorporated much agriculture because "cattle-raising probably provides greater output for less effort than African agriculture" (p. 122).

- Meyn, Klaus  
1970 Beef Production in East Africa. Munich: Weltforum Verlag.

Although much of the book is concerned with animal production, there is much useful information on marketing and ranching in Kenya.

- Murmann, C.  
1974 Change and Development in East African Cattle Husbandry. Copenhagen: Akademisk Forlag.

Murmann compares two East African societies, the Kipsigis and Kikuyu, that have experienced great changes in their livestock economy with two that have not, the Karimojong and Sukuma.

Cminde, S.H.

1971 The Semi-Arid and Arid Lands of Kenya. Berkeley: University of California Press.

Ominde's work is an excellent survey of the arid and semi-arid lands of Kenya. In terms of development, the author identifies the problem of transport and communications as critical in this region.

Peberdy, J.R.

1969 Rangeland. In East Africa: Its People and Resources. W.T. Morgan, ed. Nairobi: Oxford University Press.

This article provides an excellent overview of Kenya's pastoral sector. It is especially useful for development planners in that it divides the pastoral regions into a number of easily identifiable categories.

Pratt, D.J. and M.D. Gwynne

1977 Rangeland Management and Ecology in East Africa. London: Hodder and Stoughton.

In addition to providing the most comprehensive survey which has ever been done on the range environment in East Africa, the book contains a chapter on livestock development. The case study of a development project which is dealt with in some detail is the implementation of group ranches among the Kaputei Maasai. In this analysis, the authors point to the fact that the group ranches have increased equity problems in the region.

Prole, J.H.

1967 Pastoral Land Use. In Nairobi: City and Region. W.T. Morgan, ed. Nairobi: Oxford University Press.

The author analyzes the effects of the 1961 drought on the Kajaido Maasai. Included in this article are data on herd growth after the devastating drought.

Rigby, Peter

1968 Pastoralism and Prejudice: Ideology and Rural Development in East Africa. Nkanga 4, Makerere Institute of Social Research, Kampala, Uganda.

Rigby suggests that government officials in East Africa are biased against pastoralists and this often affects their actions toward them.

1969 Cattle and Kinship Among the Gogo. Ithaca: Cornell University Press.

1977 Local Participation in National Politics: Ugogo, Tanzania. *Africa* 47: 89-107.

Both of these works deal with the pastoral Gogo of Central Tanzania. While the earlier work is a theoretical assessment of Gogo kinship, the most recent paper looks at Gogo pastoralism under Tanzania's current Ujamaa policy.

Schneider, Harold K.

1959 *Pakot Resistance to Change*. In W. Bascom and M.J. Herskovits, eds. *Continuity and Change in African Cultures*. Chicago: University of Chicago Press.

Schneider analyzes some of the reasons why pastoralists tend to be more resistant to change than agriculturalists.

Schneider, Harold K.

1964 *East African Aboriginal Economics*. In *Economic Transition in Africa*. M.J. Herskovits and M. Harwitz, eds. Evanston: Northwestern University Press.

1970 *The Wahi Wanyaturu: Economics in an African Society*. Chicago: Aldine.

Both of these works are concerned with the pastoral economy of the Turu of Central Tanzania. In addition to showing the relationship between economic variables and social institutions in Turu society, the latter work also includes a discussion of destocking efforts in Central Tanzania.

1974 *Economic Change and Economic Development: The Case of East African Cattle*. *Current Anthropology* 15: 259-265.

1978 *Pastoralism and Development in East Africa*. Paper presented at the Xth Annual Anthropology and Ethnological Sciences Meetings, Delhi, India.

In both of these papers, Schneider is examining the reasons why development efforts in pastoral East Africa are often unsuccessful. In the latter paper he suggests that group ranches in Kenya are apt to lead to increased equity problems among the pastoralists.

Simpson, Morag C.

1973 **Alternative Strategies for Range Land Development in Kenya.** Rural Development Study No. 2, University of Leeds.

Having done extensive development work in Africa's pastoral areas, Simpson provides an overview of Kenya's strategies for range land development. In short, he recognizes that the development of Kenya's pastoral regions entails social problems: "The modernization of animal husbandry in the semi-arid areas appears to be one of the most intricate social problems in Africa" (p. 1).

Spencer, Paul

1965 **The Samburu.** London: Routledge and Kegan Paul.

1973 **Nomads in Alliance.** London: Oxford University Press.

While the earlier work is concerned mainly with the Samburu of Northern Kenya, Spencer's latter work deals with both the Samburu and Rendile. In this more recent study, Spencer shows how a symbiotic type relationship exists between the two groups based on the fact that the two livestock economies (the Rendile is dominated by camels) do not compete for the same grazing resources.

1974 **Drought and Commitment to Growth.** African Affairs 73: 419-427.

Spencer suggests that drought in East Africa is as much a result of the pastoralists' commitment to herd growth as it is to anything else.

Talbot, L.M.

1972 **Ecological Consequences of Rangeland Development in Masailand.** In *The Careless Technology*. M. Farver and J. Milton, eds. Garden City: Natural History Press.

The author analyzes "the consequences of rangeland development when basic ecological principles are overlooked or ineffectively applied" (p. 694).

1972 **Department of Veterinary Services**

**Overstocking Problem in Tanganyika.** Tropical Agriculture 32: 30-37.

Early account of two development schemes in Tanzania which attempted to enforce destocking regulations. Neither of the schemes met with much success.

Tanzania Notes and Records

- 1975 Livestock Development After Independence. Tanzania Notes and Records 76: 67-70.

A short summary of Tanzania's development efforts in the livestock sub-sector post-Independence.

Tindimwebwa, I.

- 1972 Diffusion of Cattle-Farming in Igara County, West Ankole (Uganda). Occasional Paper No. 45, Department of Geography, Makerere University.

The author examines the following innovations in Ankole pastoralism: "the use of cattle-spraying, the use of barbed wire fencing, adoption of exotic cattle, the use of cattle feeds, and the use of artificial insemination" (p. 10). The results indicate that there is a correlation between the adoption of these innovations and proximity to tarmac roads.

Turner, B.

- 1967 Ecological Problems of Cattle Ranching in Combretum Savanna Woodland in Uganda. East African Geographical Review 5: 9-19.

The introduction of cattle ranching in Western Uganda has, according to the author, led to ecological problems, e.g., bush thickening.

Turton, D.

- 1977 Response to Drought: The Mursi of Southwestern Ethiopia. In Human Ecology in the Tropics. J. Garlick and R. Keay, eds. London: Taylor and Francis.

Turton explains some of the advantages of keeping livestock in a mixed economy. First, they provide something to fall back on during crop failure and, secondly, they can be exchanged directly for grain.

Williamson, H.

- 1968 Experiences with Grade Dairy Cattle in the Peasant Economy on Mount Meru, North Tanzania. Ostafrikanische Studien 8: 211-226.

This article summarizes a very successful project which took place in Northern Tanzania in the 1960s and was designed to make the local people self-sufficient in milk. The program was such a success that demand for grade cattle far exceeded what was anticipated.

Winter, E.H.

1962 Livestock Markets Among the Iraqw of Northern Tanganyika.  
In Markets in Africa. P. Bohannan and G. Dalton, eds.  
Evanston: Northwestern University Press.

The article addresses the factors which explain the market offtake of cattle in Northern Tanzania. In this region, cattle are highly valued as a "medium" for obtaining grain.

V. SOUTHERN AFRICAN PASTORALISM (Zambia, Botswana, Lesotho, and Swaziland)

AID

1977 Botswana Range and Livestock Management Project: An Ammendment. Washington, D.C.

This document is the revision of the Botswana Range and Livestock Management Project which began in 1973. The authors of the amended Project Paper emphasize the importance of sociological variables in the project.

Ashton, Hugh

1952 The Basuto. London: Oxford University Press.

In addition to providing an introduction to the major ethnic group of Lesotho, the book contains a chapter on Basuto livestock production. As the author points out, Basuto pastoralism is threatened by a declining land base: "Today, the growth of population has so restricted grazing that most Lowlanders have to keep their stock at Highland cattle-posts, and even in the Highlands many people have to keep their animals at cattle-posts rather than at the village" (p. 136).

Botswana Notes and Records

1972 Rural Development Conference. Botswana Notes and Records 3: 155-201.

This collection of papers is an excellent introduction to rural development in Botswana. Of particular interest to pastoralism is K.E. Butler's "Environmental Constraints to Livestock Production", an article analyzing some of the ecological problems to be overcome in the development of the pastoral sector.

Carvalho, E.C. de

1974 "Traditional" and "Modern" Patterns of Cattle Raising in Southwestern Angola: A Critical Evaluation of Change from Pastoralism to Ranching. Journal of Developing Areas 8: 199-226.

The author argues that any efforts to transform "traditional" pastoralism into a commercial ranching enterprise is likely to necessitate radical changes because the former system emphasizes milk production while ranching is concerned with beef production.

Doran, M.H., A.R.C. Low, and R.L. Kemp

1979 Cattle as a Store of Wealth in Swaziland: Implications for Livestock Development and Overgrazing in Eastern and Southern Africa. American Journal of Agricultural Economics 61: 41-47.

Through a regression analysis of Lesotho livestock sales, the authors demonstrate that there is a weak relationship between price and livestock sales in Lesotho. The authors suggest that this is related to the fact that Lesotho livestock serve as a store of value and an excellent form of investment, thus the herdsmen are reluctant to forego this store of value for Lesotho currency. This article is recommended for individuals interested in livestock marketing in Africa.

Fielder, Robin J.

1973 The Role of Cattle in the Ila Economy: A Conflict of Views on the Uses of Cattle by the Ila. African Social Research 15: 327-361.

Fielder examines the rationale for the low marketing off-take rate in a pastoral region in Zambia. His results indicate that Ila are reluctant to sell cattle beyond a certain point because the animals are needed for social obligations and because there are few investment opportunities available which are as lucrative as livestock investments. To quote the author: "People will not sell more cattle unless the increased cash which they get in return can be spent on something of equal investment value, or at least on visibly worthwhile durable consumer goods" (p. 359).

Fosbrooke, H.A.

1975 An Assessment of the Importance of Institutions and Institutional Framework in Development. Botswana Notes and Records 5: 39-46.

Having had considerable experience in pastoral development in Eastern and Southern Africa, Fosbrooke discusses Botswana's development strategy for the pastoral sector. In doing this, the author makes a comparison between Botswana's ranching strategy and the group ranching approach found in East Africa.

Hinchey, Madalon, ed.

1979 Proceedings of the Symposium on Drought in Botswana. Gabarone: The Botswana Society.

This collection of papers contains a number of excellent articles on Botswana pastoralism. Included are the following: Prah, K.K., "Some Sociological Aspects of Drought;" Hitchcock, R.K., "The Traditional Response to Drought in Botswana;" Ward, K.W., "Livestock Marketing and Supplemental Feeding in Times of Drought;" and Von Kaufman, R.R. "The Tribal Grazing Land Policy's Relevance in a Drought".

Kuper, Adam

- 1970 Kalahari Village Politics. Cambridge: Cambridge University Press.

The author examines micro-political processes among a pastoral group, the Kgalagari, of Western Botswana. Germane to the subject of pastoralism is the appendix at the back of the book which contains information on livestock numbers and marketing activities in Western Botswana.

- 1975 The Social Structure of the Sotho-Speaking Peoples of Southern Africa. Africa 45: 67-81, 139-149.

This two-part article provides a good introduction to the social structure of the peoples that inhabit a large part of Botswana, as well as parts of Lesotho.

Kuper, Hilda

- 1952 The Swazi. London: International African Institute.

- 1963 The Swazi: A Royal South African Kingdom. New York: Holt, Rinehart, and Winston.

These two works are the main introductory books on Swazi society. The author is a noted anthropologist.

Landell-Mills, P.M.

- 1972 Rural Income and Urban Wage Rates. Botswana Notes and Records 2: 79-84.

One subject discussed in this paper is the marketing of cattle and how drought affects this activity. Included are good statistics on per capita livestock holdings in some parts of rural Botswana.

Low, A.R.C. and R.L. Kemp

- 1977 Destocking Dynamics: The Implications of a Swaziland Example. Oxford Agrarian Studies 6: 26-43.

An economic assessment of destocking in Swaziland.

Lutke-Entrup, J.

- 1971 Limitations and Possibilities of Increasing Market Production of Peasant African Cattle Holders in the Western Province of Zambia. Communication No. 7, Published by the University of Manchester Press for the Institute of African Studies, University of Zambia, Lusaka.

The author cites transportation as one of the more important impediments to increasing livestock marketing in Western Zambia.

Nteta, Phophe

1975 The 1972 Cattle Sample Census. Botswana Notes and Records 5: 37-40.

The article discusses the methodology for taking a cattle census in Botswana.

Sansom, Basil

1974 Traditional Economic Systems. In The Bantu-Speaking Peoples of Southern Africa. W.D. Hammond-Tooke, ed. London: Routledge and Kegan Paul.

The article is a general discussion of traditional economies in Bantu-speaking Southern Africa. Topics dealt with are the role of cattle as capital, rain-fed grain production, and the use of cattle as plough animals.

Schapera, Issac

1953 The Tswana. London: International African Institute.

Schapera is the best known social scientist to work among the Tswana of Botswana. This monograph is an introduction to Tswana social organization and economy.

Scott, P.

1951 Land Policy and Native Population of Swaziland. Geographical Journal 117: 435-437.

As Scott reveals, already in the early 1950s there was a scarcity of good grazing land in this densely populated country (Swaziland).

Syson, Lucy

1972 Social Conditions in the Shoshong Area. Botswana Notes and Records 4: 45-65.

Using data from the UNDP project in the Shoshong region, the author analyzes a number of pastoral issues such as the role of the "mafisa" institution (i.e., cattle loaning) in rural Botswana.

Tuden, A.

1968 Ila Property Relations and Political Processes. In Local-Level Politics. M. Swartz, ed. Chicago: Aldine.

Tuden examines how kinship constraints affect the distribution of cattle in a Zambian community.

Vivelo, Frank R.

1976 The Entry of the Herero into Botswana. Botswana Notes and Records 8: 39-46.

Having moved from neighboring Angola, the pastoral Herero have recently become some of the wealthiest cattle owners in Western Botswana.

Werbner, R.P.

1975 Land, Movement, and Status Among the Kalanga of Botswana. In Studies in African Social Anthropology. M. Fortes and S. Patterson, eds. London: Academic Press.

Werbner analyzes land tenure practices in a mixed economy of the highland region of Eastern Botswana.

Wily, Liz

1979 Settlement as a Strategy for Securing Land for Nomads: An Examination of the Botswana Government's Current Programme of Settling the Kalahari San. Pastoral Network Paper 7c, Overseas Development Institute, London.

Wily's paper highlights the land conflicts which exist in Western Botswana between the pastoralists and hunter-gatherers. As a way of protecting hunting areas from the pastoralists of the region, the government has initiated a number of settlement schemes to guarantee certain hunting areas for the local hunters.