

SMALLSTOCK AS CASH CROP, SMALLSTOCK AS HABBANAYI: FULBE EXCHANGES IN THE TWENTY-FIRST CENTURY¹

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Pastoralist Fulbe have always exchanged livestock with each other as loans, and with cultivators for grain and other commodities. Today, because of their quicker growth and easier convertibility into cash, smallstock have become the slush funds of pastoralist households. Bucks and rams buy food and commodities, but young nannies and ewes still enter customary loan circuits that cement social networks and facilitate access to resources. The dialectic between communal and market systems and the growing network that connects pastoralist economies to global economies confounds old theories, and calls for more research and new theory that explains the networks and chains of these local, national, and global connections. (Pastoralism, livestock markets, livestock loans, socio-economic networks, commodity chains, Fulbe, West Africa)

INTRODUCTION

Were the term “capital” to be applicable to classical antiquity . . . then the nomadic hordes with their flocks on the steppes of Central Asia would be the greatest capitalists, for the original meaning of the word capital is cattle (Marx 1964:119, cited in Turner 2009:747).

We are in a capitalist system only when the system gives priority to the endless accumulation of capital. Endless accumulation . . . means that people and firms are accumulating capital in order to accumulate still more capital, a process that is continual and endless. If we say that a system “gives priority” to such endless accumulation, it means that . . . those who act with other motivations are penalized in some way, and are eventually eliminated from the social scene, whereas those who act with the appropriate motivations are rewarded and, if successful, enriched. (Wallerstein 2004:24)

With a little tweaking one could replace Wallerstein’s “capital” with “livestock” (also an archaic meaning of cattle), because it is the pastoralist’s objective, though not his or her ultimate goal, to endlessly accumulate livestock. The pastoralist, whether on the steppes of Asia or in the Sahel of Africa, who does not accumulate livestock soon must find another way of life, and may be forced to leave the community or even change ethnicities (Haaland 1969; Broch-Due 1999). I use this analogy, Marx’s quote, and Wallerstein’s theory as foils against which to problematize the conventional wisdom of pastoral economies as primitive, or at least not on a par with, “modern” household market

economies. In fact, as this article will show, pastoral economies are today very much tied to markets and cash economies.

The above analogy is limited, however, in that (1) the pastoralist's ultimate goal is not livestock in and of itself, but to maintain the household and sustain household members, especially children; (2) though extensive pastoralism persists in various forms on almost every continent, it is not an integrated world-system; and (3) any research into pastoralism must deal with both human agency and the natural environment, something that Wallerstein (1974, 2004; Goldfrank 2000) does not take up. The first limitation illustrates the ultimate rationality of the pastoralist objective, whereas the endless accumulation of capital for no other reason seems rather irrational. The second limitation shows how pastoralist societies are "embedded" in the various natural environments to which they have adapted, as well as the different wider socio-economic environments through which they must negotiate. The third helps to explain how pastoralists struggle with their surrounding natural environments, often very risky, and collaborate and contend with household and family members, with rangeland neighbors, or with traders, brokers, and government officials. Moreover, where capitalism might be checked by various governmental regulations and the demands of labor, pastoralism is also impeded, often moreso, by the natural environment. Though capitalism might find itself more and more vulnerable to the natural environment with global warming, the problems pastoralists have with government interference and labor often pale when compared with the droughts or epidemics that confront them.

Intersecting with all three of these obstacles, however, livestock exchanges mitigate difficulties. Markets and loans allow pastoralists to exchange animals for cash to buy fodder, pay taxes or purchase labor, barter livestock for labor and other resources to sustain and enlarge herds, and shift animals temporarily to kin and friends without losing ownership. Though research (Swift 1986; Fafchamps and Gavian 1996; Turner and Williams 2002; McPeak and Little 2006) has shown how livestock marketing in developing countries has become an essential component in both pastoral and national economies, many development and government officials and agents still see pastoral economies as primitive. Indeed, under Wallerstein's thesis, they would be relegated to external areas, outside even the periphery, because, ironically, they are not capitalist.

This article examines exchanges of smallstock (sheep and goats) among the Fulbe of central Niger in order to accomplish three overlapping purposes. First, I outline and illustrate the networks of two intersecting types of exchange: communal and market. I concentrate on smallstock instead of cattle because smallstock have become ubiquitous as market slush-funds for pastoralists—like cash crops, a way to obtain ready money. Yet they also continue to enter

communal exchange and the barter economy. Despite their ubiquity and importance to pastoral households, they have been almost ignored by pastoral researchers (though not necessarily by development projects) who pay much more attention to more prestigious and more expensive cattle. Second, this illustration of exchanges, unsatisfactorily sketchy, points to the need for more comprehensive research into pastoralist livestock exchange, especially marketing in West Africa. To conclude, I ask questions about grand narratives and development research. What sort of theory might address both the local and global exchange networks that I discuss in this article? While Wallerstein's theory skips over most communities in external areas, Tsing's theory of global connections (2005)² may help to link the pastoralist to well owner, butcher, exporter, or even a Chinese battery manufacturer.

THE RESEARCH AREA AND METHODS

This article discusses two groups of Fulbe, a geographically extensive and culturally diverse people who reside across West Africa and into Sudan and Central African Republic. The Wodaabe live mostly in Niger, and the Katsinen-ko'en reside throughout central and southeastern Niger and central and northeastern Nigeria. My research communities live and migrate primarily in the département of Tanout, northwest of the town of Tanout, in central Niger. Rainfall here in the northern Sahel is very unpredictable, ranging from about 150 to 350 mm per year, in one rainy season of two to three months. Mobility is the most important livelihood strategy for pastoralists to cope with such an unpredictable climate (see, e.g., Thébaud 2002; Bollig 2006; Global Drylands Initiative 2007).

Most Katsinen-ko'en in my research area live as mobile agropastoralists; some are sedentary agropastoralists, and some are exclusive ("pure") pastoralists who do not cultivate. Most Wodaabe are exclusive pastoralists, but count a few mobile agropastoralists in their communities. No households, even sedentary, live in villages, but scatter over hills around wells. All households, including almost all adult members and many children,³ own and raise livestock, even if only a herd of goats. Mobile households own cattle and smallstock. Exclusively pastoralist households rely year-round on sales of livestock and dairy products to buy grain and other foodstuffs. The agropastoralists of my research communities live at the edge of possible cultivation where only one out of every four or five harvests will provide enough grain for an entire year. For the rest of the year these households rely on livestock sales and other income generating activities.

Recent research in Niger (Marty 2005; *Projet de Sécurisation des Systèmes Pastoraux* 2009) illustrates how pastoralist mobility has important effects on

local and regional markets, bringing a significant, if not vital, revenue source from northern rangelands to southern markets in the course of annual migrations. Other migrations distribute pastoralist livestock and dairy sellers and grain purchasers from one area to another. My research and experience suggest that a household's degree of mobility also affects its members' ability to acquire livestock loans. The less mobile a household, the less it can respond to the "patchiness" of pasture and rangeland that results from the erratic storms of the rainy season. Less mobile or sedentary households are perceived as less able to raise healthy and fertile livestock, especially cattle, and thus make less welcome livestock borrowers. Members of such households do give and receive smallstock, however, though in fewer numbers than more mobile pastoralists.

Part of the information in this article comes from my dissertation research on Katsinen-ko'en household economics: 18 months (May 2006 through October 2007) of conversation, participation-observation, and a survey of 127 women and men of 60 Katsinen-ko'en households in four different communities. I add to this research several years of experience, two development projects, and ethnographic research with Wodaabe families. With my Wodaabe friends' help, I have owned, loaned, and marketed my own livestock.

TWO EXCHANGE SYSTEMS

In order to discuss the details of household economics, it will be helpful to classify, heuristically at least, two different types of exchange systems that come into play within and between households and their members. I call these systems communal exchange and market exchange. One might view the systems as similar to Gudeman's (2001:9–10) "communal" and "market" realms, Polanyi's "reciprocity" and "market" categories (Hunt 2002:106, citing Bohannan), and Roseberry's (1989a:202) "natural" and "money" categories, though without the cultural/rational or traditional/modern dichotomies that the latter two theorists imply. Interactions between individuals in village marketplaces in Niger are often, if not usually, just as real and social, even cultural, as economic interactions between members of a geographic or kin-based community, which are just as rational as the former. Cash transactions occur between community members, just as non-kin social networks, involving communal exchanges with villager and market friends, facilitate pastoralists' market exchanges. The two systems articulate with each other dialectically. Barter overlaps with and connects the two systems as when a husband exchanges his ewe for his wife's ram, which he then sells in the marketplace, or a householder exchanges a buck and cash for access to a well and water for his herd and household.

Livestock Loans

Although there are several ways, including different types of endowments, of transferring or exchanging livestock in the communal system of Nigerien Fulbe, the institution of *habbanayi* (pl. *kabbanaaji*)⁴ loans is perhaps the most wide-spread, extending to neighboring ethnicities (see, inter alia, Dupire 1962:136–8; Starr 1987; Loftsdóttir 2008:72; for an East African example, see Bollig 2000). The institution connects individuals within and between communities: kin, non-kin friends, and even strangers build and maintain social networks through the loans. *Kabbanaaji* redistribute livestock among pastoralists and offer a means to reciprocate favors that translates between ethnicities.

A person wishing to help a friend or relative, or thank him or her for a service or gift, loans them a young female animal that has not yet given birth. The borrower cares for her for the duration of the loan: one, two, or three births depending on the strength of the relationship and type of animal. The borrower keeps the offspring or accepts the loss if the baby dies, and also milks the mother animal, if a ruminant. Often when borrowers return the loaned mother, they include the loan of another young female, especially if they want to strengthen the relationship. Animals loaned through *habbanayi* never enter the market system (except against institutional rules) until the owner decides to sell a returned mother. The exchange, characteristic of communal exchanges, serves principally to build a relationship and secondly to build the material capital of the borrower.

Local Marketplaces

Markets and trading have been a part of West African economic life at least since, and probably before, the rise of cities and the establishment of marketplaces in the first centuries of the last millennium (Smith 1972:186; Coquery-Vidrovitch 1991). Pastoral Fulbe have always participated in various types of exchange, including dairy and livestock barter or marketing for grain and other items that they do not produce themselves, such as clothing, cooking pots, tools, and jewelry. They have also, when necessary, hired and engaged in herding labor for payment in kind. After the turn of the twentieth century, marketplace participation expanded in West Africa, first with colonists' demand for taxes (and their support of marketplace development, at least in West Africa [see Moritz et al. 2009]), which increased cultivators' and pastoralists' need for cash (Dupire 1962; Baier 1980:140). When the droughts of the 1970s and 1980s reduced the ability of herding and cultivating households to live primarily from

dairy production, trading dairy products for grain, and harvests, pastoralists and agropastoralists became even more involved in the market.

Today, household members in my research area go to marketplaces, on rough average, once a month. Most Nigerien large towns and many larger villages hold weekly markets throughout the year. Each market presents different options for sale or purchase, and different people attend markets for different reasons: to sell or to buy livestock, dairy products, grain, dishes, cloth, clothing, and other commodities and food stuffs. Only four larger markets in Tanout département (Tanout, Bakin Birji, Tsamia, and Belbeji) contain sections for large livestock exchange (cattle, camels, donkeys, and horses). Large livestock markets require specialized personnel, including *dilali* (livestock brokers), drovers, and government agents who register sales and collect fees, in addition to the collected attendance of purchasers with enough money to buy more expensive animals. A man might try to sell a cow or camel in a smaller market, but would probably find few if any buyers. Even small marketplaces, however, contain a smallstock market in which local butchers, among other purchasers, buy the goats and sheep that they will slaughter during the week. Except when they migrate north into the rangeland, pastoralists are usually no more than an overnight travel away from a smallstock market.

Town and village marketplaces differ not only in size but also by their access to either the highway or dirt roads and paths followed by vans, small pickups, and large trucks, and livestock drovers and other market goers walking or mounted on donkeys, camels, or horses. The larger the market, and the better the road that leads to it, the more imported commodities arrive and the lower the prices for items such as grain, sugar, dried tomatoes, and cloth. The market network of Tanout département takes full advantage of the national highway that bisects the département, leading north into Algeria, south to the east-west trans-Nigerien highway, and ultimately into Nigeria.

THE IMPORTANCE OF SMALLSTOCK

Smallstock fulfill many functions in the pastoralist household. Women use goat milk⁵ for meals and sale when they have no or too little cow milk; rams and ewes are slaughtered for naming ceremonies and enter into marriage negotiations; a household head may slaughter an occasional buck to host an important visitor or women visiting his wife after she has given birth. Much more frequently, however, males and old females are sold in the marketplace for cash, and young females are loaned within kin and non-kin social networks in exchange for resources or favors, or to help a relative or friend increase their herd.

Cash

During my dissertation research, when I asked people how they obtained cash, most men and some women answered, “Nokka nder bisaaji” (take from my smallstock for sale). Though the livestock-wealthy householder (husband) may be able to sell a three- to five-year-old bull to provision his household with a year’s worth of grain, the majority of men, both Katsinen-ko’ en and Wodaabe, sell smallstock every few weeks to purchase a bag or two at a time. Smallstock are also conveniently sold to make biweekly or monthly purchases of sauce ingredients, cooking oil, livestock salt, sugar, and tea.

During the research period, I recorded millet prices from 325–375fCFA per measure at harvest to 450–500f just before the rainy season.⁶ Sorghum prices usually trail those of millet by 25–50 francs per measure. Without harvested grain, a small household of two adults and three young children will spend between 100,000f and 120,000f in a year (\$200–\$240) selling a young buck or ram, or two, every month at 9,000f to 15,000f (\$18–\$30) to buy just over a small sack (20 measures) of grain, plus other food and household necessities. A large fattened ram can sell for more than 50,000f during Ramadan, and old ewes, valued for the toughness of their hides, can sell for 20,000–25,000f.

Over and over again, pastoralists emphasize the importance, for a well-maintained household, of a large smallstock herd that will support the cattle herd. Livestock-poor agropastoralist households own smallstock that they sell to buy grain that complements frequently poor harvests, but even among the livestock-wealthy, smallstock sales keep cattle, especially fertile cows and heifers, out of the market.

Habbanayi

More smallstock than cattle are loaned as kabbanaaji, primarily because more people own more smallstock, especially women and young men. As smallstock herds increase relatively quickly, sales of smallstock—the offspring of loan animals and those purchased with income from other sources—also generate cash with which to buy heifers. After the 1984 drought, many men rebuilt their cattle herds through smallstock sales; and as young women’s smallstock herds grow, they also sell goats and sheep to buy their own heifers. “Kabbanaaji got me going. If I hadn’t gotten kabbanaaji, I wouldn’t have what I do today.” Two of the three cows that this Katsinen-kejo man held were loaned to him by kin; other Katsinen-ko’ en lent him smallstock, including a man from another community and an aunt who lent him a goat. A Bodaado friend loaned him a sheep.

Both men and women give and receive kabbanaaji, men more than women, though, and people in mobile households more than those in settled households. People in settled households tend not only to have less livestock to offer, but also have less access to optimal herding conditions. Because fewer women own cattle, they participate less in cattle loans, but those with smallstock often give and receive loans. Both borrower and lender take on risks with kabbanaaji:

Aminu had a brief conversation with his first wife about giving habbanayi to Dawda. Innaaji said she should probably give him a young ewe if she had one. It seems that Dawda had done her a favor for which she felt he deserved a sheep. Aminu said he wasn't going to give an animal just to have it be ruined or lost. (Field notes, Sept. 16, 2006)

If the loaned animal dies in the hands of the borrower, both resign themselves to the loss. Aminu seemed to mistrust Dawda's herding ability and was reluctant to loan him a sheep. In contrast to a heifer, however, a goat or sheep embodies not only less economic risk to the lender, but also less of an undertaking for a borrower with fewer resources.

The Table gives the numbers of kabbanaaji reported by survey participants as those that they held at the time of questioning, or just previous to questioning. The numbers are rough: a few animals had been promised but not yet collected, and a few had finished the agreed upon births but had not yet returned to their owners. Unfortunately, too few exclusive pastoralists were willing to tell us how many animals they herded, much less those they held on loan. I observed several discussions of loans among the exclusive pastoralists, however, and one Katsinen-kejo wife in an exclusively pastoralist household told me how their household obtained enough cattle and smallstock to leave cultivation: "Duuniya kokki bisaaji e kabbanaaji" (People gave us smallstock and livestock [cattle] loans). She explained that many people in the rangeland had loaned them livestock, including Tuaregs and Wodaabe.

Among kin of all households, cross cousins and siblings give kabbanaaji to female and male cousins and siblings; and maternal aunts and uncles, especially, give kabbanaaji to their nephews and nieces. Among the Wodaabe, a man or woman may just take an animal from their cross cousin's herd; the cross cousin might preempt this by agreeing to a recognized loan. Among my survey respondents, three men had given smallstock to two well owners and to one son of a well owner. Another woman who had been widowed told me how her second husband had given a goat to her son from her first marriage.

Many elderly men and women told us that they no longer participate in livestock loans—"I left kabbanaaji a long time ago!"—and they are now dependent on their children. One relatively wealthy woman retorted, however,

Table
Reported Number of Loaned Animals in Survey of Katsinen-ko'en Households

			<i>Cows</i>	<i>Sheep</i>	<i>Goats</i>	<i>Donkeys</i>	<i>All</i>	
Agropastoralists	Sedentary Cultivators	Women	Total	0	1	13	1	15
		<i>N</i> = 19	Avg.	0.00	0.05	0.68	0.05	0.79
		Men	Total	7	9	8	0	24
		<i>N</i> = 17	Avg.	0.41	0.53	0.47	0.00	1.41
		All	Total	7	10	21	1	39
		<i>N</i> = 36	Avg.	0.19	0.28	0.58	0.03	1.08
	Mobile Cultivators	Women	Total	4	8	11	5	28
		<i>N</i> = 27	Avg.	0.15	0.30	0.41	0.19	1.04
		Men	Total	47	40	26	3	116
		<i>N</i> = 31	Avg.	1.52	1.29	0.84	0.10	3.74
All		Total	51	48	37	6	142	
<i>N</i> = 58		Avg.	0.88	0.83	0.64	0.10	2.45	

“Imi nder Haabe; moy hokke am habbanayi?” (I’m in the middle of Hausa. Who would give me a loan?). She did not live literally in the middle of Hausa people, but had settled with her husband and youngest son among her sedentary kin. She felt that because her household was no longer mobile, people were unwilling to give her livestock loans, though she had loaned livestock to her nephews and nieces. Notably, the one wife who did live in a village (in the middle of Hausa and Dagara villagers) owned no livestock and held no kabbanaaji. I have not conducted the same research with Wodaabe households, but long experience leads me to believe that they give and receive more loans than the Katsinen-ko'en.

Mariama and a younger woman with their young daughters stopped to spend midday at my house in Tanout. They had gone north to D’s well to pick up several kabbanaaji sheep and were traveling by donkey back to their camp [a total journey of about 90 kilometers]. The women left in the early afternoon so they could spend the night in a village south of Tanout. (Field notes, June 7, 2006)

Certainly more Wodaabe children, at younger ages, receive kabbanaaji from their relatives than Katsinen-ko'en children. In two typical Wodaabe families I surveyed (to compare with my Katsinen-ko'en households), all children except baby girls owned some livestock. The fathers had given their children most of the livestock (including a heifer to each son), but aunts and uncles had given both girls and boys loans of goats, sheep, and donkeys. Like the Katsinen-ko'en, the Wodaabe also loan animals outside their communities. A Hausa man living in a large town once told me proudly how his Bodaado friend had given him habbanayi for hosting the Bodaado when he came to market.

The Increase of Smallstock Marketing

During the colonial era, when the French began their demand for taxes paid in cash, and at the same time facilitated the establishment of village markets, all rural Nigerien households changed their economic practices by increasing their sales of produce. Though marketing produce among Fulbe was not unknown prior to colonization, men and women at that time, and even into the colonial era, bartered more and sold livestock less often (see Dupire 1962:133 for Wodaabe in the 1950s). When the droughts of the early 1970s and 1980s devastated livestock herds, pastoralist men bought smallstock with cash from other income generating activities to breed and sell in order to sustain their households and rebuild their cattle herds. Diversifying their herds, previously composed largely of cattle, also proved good insurance against future droughts. Other phenomena, however, converged to raise the value of smallstock and the reliance of pastoralist households on their sales, including a larger demand for the animals created by the increasing proliferation of village and town markets, the further development of export routes to Nigeria, and the import of new commodities. More recent political economic reforms, such as the devaluation of the franc CFA by half⁷ in 1994 and the creation of a livestock market at Mai-Aduwa, Nigeria, in 1998, increased the necessity and ease of livestock sales, as well as the market value of exported livestock (Asuming-Brempong and Staatz 2004; Bolwig 2009:14; Turner 2009:747).

With the decrease of milk in most diets due to a decrease in average cattle holdings after the droughts, households buy more grain and sauce ingredients. Two or three generations ago, Wodaabe households relied more on women's dairy exchanges for their grain supplies (Dupire 1963:81; see also Moritz 2003; see Hodgson 2000:101 for an example from the Maasai). Women also gathered larger quantities of more available wild foods, and they even leached salt from certain clays for cooking. With the increase of grain in the Wodaabe diet and the growing ease of smallstock sales, responsibility for household grain provision

devolved onto the shoulders of male household heads. Similar changes may have occurred in northern Katsinen-ko'en households⁸ as their harvests and herds decreased in quantity and dependability.

As an additional factor, "Tuareg tea"—strong green tea from China brewed with copious amounts of sugar, also imported—has grown in popularity among Wodaabe and Katsinen-ko'en over the last 50 or so years. Elder Wodaabe remember when only influential men brewed tea for special occasions; now, few young men travel without their teapots, most women drink tea that their husbands brew, and some women even buy and brew their own. Most Fulbe men and some women buy tea and sugar every two or three weeks, and no celebration is complete without the hosts passing tea leaves and sugar around to their guests. Smallstock sales facilitate these purchases, as well as purchases of relatively new imported items, such as teapots, flashlights, shortwave radios, batteries, and plastic, aluminum, and enamel dishes.

MARKET NETWORKS AND LIVESTOCK/COMMODITY CHAINS

[W]e need to move beyond the spatial and layer cake metaphors . . . [and] concentrate on relationships that transcend spatial boundaries, that take the apparently external and make it internal to our model of a social situation. . . . [W]e need to be creative in our conceptualization and study of relationships, institutions, and networks that are apparently foreign to the community. (Roseberry 1989b:120)

Instead of analyzing research populations in spatially based layers, from local to regional, or societal layers, from family to community to states, Roseberry calls anthropologists to examine networks of relationships that link research communities to societies, political entities and markets to which they may at first seem to have no connection. Anthropologists have begun to make these connections for pastoralists (e.g. Ensminger 1996), but the view of "primitive" pastoral communities disconnected from national "progress" still exists within development and government circles.

Analysis of livestock loans reveals aspects of social network relationships, some of which transcend community boundaries, and analysis of the associations involved in livestock marketing shows networks that transcend national boundaries. When one moves beyond relationships between livestock owner and trader or broker, where both parties know each other and are part of social networks, to the anonymous connections established through commodity chains, networks expand from local to global. Here, my analysis needs much more ethnographic research, as little but participation-observation gives evidence for these commodity chains that extend from Nigerien (or even West African) pastoral communities. Although the Nigerien government recognizes the

importance of livestock exports for the national economy, no one knows how many animals exported from Niger come directly from pastoralists, or from pastoralists through villagers. The Service des Ressources Animales in Tanout records livestock sales and prices in a few larger markets, but no accounting is made either of the animals' provenances or of their destinations.

As another example, when Fulbe pastoralists boycotted the Tanout market for about a month in 2006 (the fourth boycott in perhaps eight years), both townspeople and local government experienced economic disruptions when women's income from food sales on market days dried up, brokers' and traders' incomes plummeted when Nigerian livestock traders gave up coming north, and the livestock market for non-pastoral livestock also fell. The network ruptures were only experienced, however, as little was recorded, much less analyzed. I recorded little but hearsay—the complaints of my women friends in Tanout who sold food to marketing pastoralists, and the results (heard secondhand) of a meeting of Fulbe chiefs in Tanout. The Fulbe chiefs and other activists attempted to negotiate with the *préfet* (whom the Wodaabe detested), who told them that he had no business with the market, implying that he cared nothing about it. They next turned to the *canton* chief. At the same time, they sent a letter to “Niamey”—the President or the Interior Minister, both of whom pastoralists believed to be sympathetic—demanding the clearing of traditional migration routes from the fields that had “eaten” them, a reduction of often exorbitant fines for field damages, the removal of extra and unfair government fees at the market, and more equitable distribution of food aid. The boycott ended when the leaders felt that their demands were addressed, if not entirely enforced. Later I spoke with a Bodaado who claimed to have been the instigator of the boycott (confirmed by one of my Wodaabe assistants). He was very proud of his role as rabble-rouser, advocating for the rights of pastoralists though he had never been to school.

Marketplaces

The research area lies amidst several village and town markets, which could be categorized as local markets ranging in size from primary to tertiary, and regional markets. The mid-sized secondary and tertiary local markets function as intermediary markets, for different geographic populations, between households and small primary markets and the large regional markets. Larger markets tend to have better prices for pastoralists than the smaller markets—higher prices for selling smallstock and lower prices for purchasing grain and imported commodities.

Northern hamlets along the highway provide meeting places for pastoralists living in the rangeland who come to find a ride to Takoukout or Tanout markets, or to buy tea, batteries, soap, or cookies for their children in shops that border the hamlets' autoparks. A butcher in the northern hamlet buys smallstock from pastoralists and sells roasted meat, and hamlet women might buy a goat or ram for milk or for fattening.

For livestock exports, Mai-Aduwa, just over the border in Nigeria, acts as the international market, though some smallstock, especially sheep, are also trucked north to Agadez and the Maghreb. Nigerian traders travel north from Mai-Aduwa to buy livestock in Nigerien regional markets, and Nigerien traders truck and drive (on the hoof) livestock that they purchase in regional and local markets to Mai-Aduwa.

Travel and Transport

Most smallstock is driven on the hoof from household to marketplace, but many are trucked along the highway from hamlet to marketplace, or market to market. Commodity merchants, grain dealers, and dilali travel weekly circuits from one market to the next. Several roads besides the paved highway serve marketplaces in the area. Dirt and laterite roads lead market trucks and vans through chains of markets. Vans, buses, and trucks, small and large, follow the highway between Zinder and Agadez. Market trucks, mostly Peugeot 404s with high tarps tenting their beds and 19-passenger vans, pick up pastoralists from northern hamlets on Friday and Sunday afternoons for the Tanout Saturday and Takoukout Monday markets, and return on the afternoons or evenings of market day. The vehicle assistants load goats and sheep onto the vans' roof racks or atop the frames over the pickup beds, tying the animals skillfully (usually) so that they arrive alive and uninjured at the marketplace. When purchased for sale further south, smallstock are again loaded into vehicles. Almost every Tanout market draws several large Nigerian trucks, with their wood-slatted sides painted in colorful flowers and animals, that haul smallstock to Nigeria. Older vans, emptied of their seats, are also packed with goats and sheep for the trek south, either to Bakin Birji, Zinder, Koundoumawa, or Mai-Aduwa.

Traveling west from Gourbobou on an oxcart, I saw a couple of drovers some distance off the sandy road, driving a good-sized flock of goats and sheep. The men with the ox-cart told me that the drovers drive the animals from Gandou market to Tanout. Perhaps they also picked up animals at Batté. (Fieldnotes, Dec. 30, 2006)

Except for smallstock trucked to and from regional markets along the highway (and perhaps from Belbeji and Tsamia), almost all other livestock is driven on

the hoof from the pastoralist's camp or villager's house to market, and from local to regional market. A few are loaded, with human passengers, into the beds of large trucks that can navigate the deep sand of dirt roads. Large livestock are driven by professional drovers south from Tanout, Bakin Birji, and probably Tsamia and Belbeji. Tanout dilali hire professional drovers, as a free service to the pastoral-ists who patronize them, to collect livestock on Friday morning at Takoukout and drive the animals the final leg of the journey to Tanout.

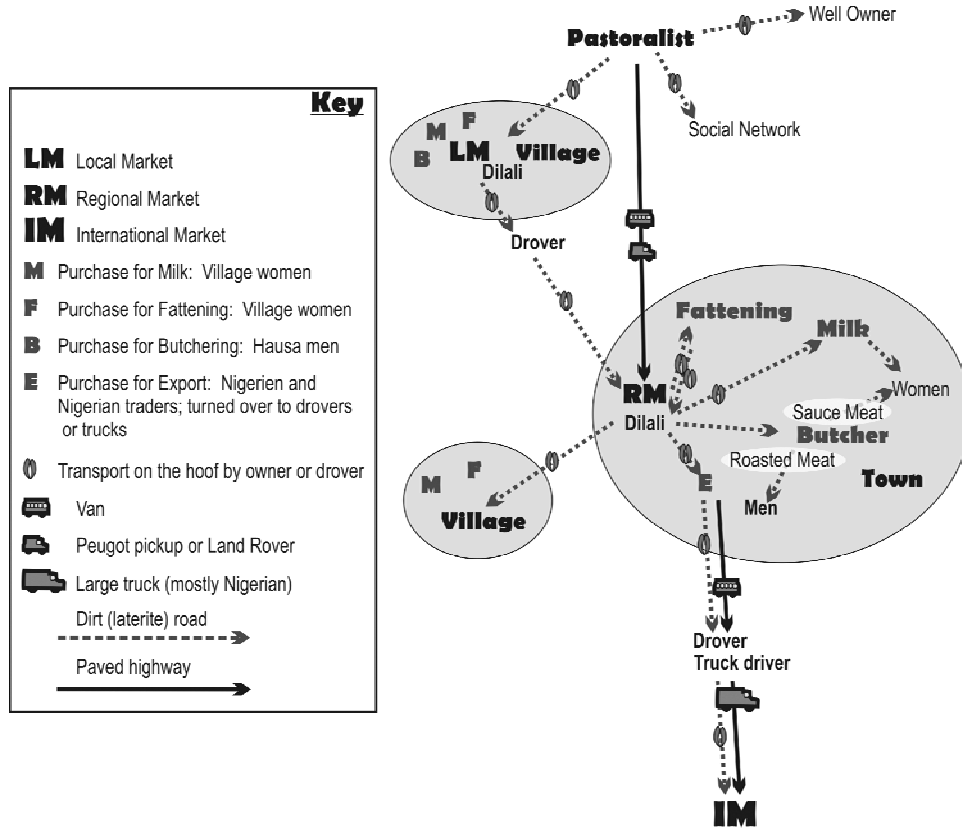
For example, from Edigini well, about 25 km north of Takoukout, Wodaabe travel to Tanout's Saturday market through Takoukout. Women ride donkeys and men drive the livestock to Takoukout. They spend Thursday night in a wadi east of the village. After rising at dawn to arrive early in Takoukout, the men first turn their cattle and smallstock over to their Tanout dilali's drovers. They leave their donkeys in a villager's compound, and then find a van to take them and the women to Tanout. The drovers walk with the livestock beside the highway, the fastest route through the laterite hills. Where the highway climbs through cliffs, they herd the animals on the pavement, a safer tactic with a larger, more visible herd than for an individual driving a few animals.

Networks and Chains

In the Figure, one can see that the livestock market network extends from pastoralists to villagers to city dwellers in Niger and Nigeria. Potential smallstock purchasers at most markets include butchers and women (and some men) who buy goats and some sheep for milk, and rams and bucks for fattening. Women and men also buy smallstock for breeding. Dilali and drovers link sellers and purchasers to others, including exporters (Nigerian and Nigerien), through further sales. Exporters, especially, are connected through brokers, drovers, and truck drivers to markets in Nigeria. In towns and villages, butchers sell sauce meat (with bones) to women in the morning and roasted meat (mostly to men) in the evening. Butchers' wives cook head meat for sale. Village women culture goat milk for sale in their neighborhoods, and those who have fattened a ram or buck return it to the marketplace. The livestock chain ends (as far as I know) in Nigeria when meat is sold to Nigerian consumers, but Nigerien pastoralists are connected to global commerce through their purchases of imported commodities.

Purchased imports include radios, flashlights, batteries, and cloth from China, medicines from India, rice and palm oil from Indonesia, plasticized tarps from Scandinavia, powdered milk and macaroni from the Maghreb, and used clothing from Europe. When one considers such imports, one can see that the commodity

Figure



network appears much different from Wallenstein's core/semi-periphery/periphery system. The network extends, with a few exceptions, from periphery and semi-periphery countries to what one might term an economy in the external area. Moreover, the pastoral economy of Niger is not connected to India, China, and Indonesia by labor and capital but by commodity imports. World-systems theory tells us little about the connections between pastoral households in Niger and an abattoir in Nigeria, or to the workers on a palm-oil plantation in Indonesia, and even less about connections to other households in, or the national economy of, Niger.

FURTHER RESEARCH AND DEVELOPMENT: LIVESTOCK MARKETING AND NEW THEORY

[T]he livestock industry is not typically seen by development experts as a progressive sector or dynamic force in the Sahelian economy. This is due to their narrow view of the economic roles played by livestock . . . allowing primitive labeling of pastoralists to dominate their thinking in development and conservation circles. (Turner 2009:747)

And if world centers provide the dynamic impetus for global change, why even study more peripheral places? (Tsing 2005:3)

There is a great need for more comprehensive research based on pastoralists' livestock exchanges, both loans and marketing and the interactions between them (see also Bolwig 2009).⁹ Not only do we need, as Little and McPeak (2006) advocate, to examine how livestock marketing can be improved to benefit pastoral households, we must also show how livestock exchanges connect pastoral households to other households in their native countries in mutually advantageous ways, and through marketing networks and commodity chains to global commerce. We must understand how communal exchanges such as livestock loans are not simply relics of an outdated culture, but how these exchanges developed historically in conjunction with market trade, and analyze how they now work with and support market exchange.

Because pastoral livelihoods and livestock markets are so closely linked to ecological and climate processes (as is global commerce), we must consider how climate change might effect changes in livestock exchange, communal and market, besides the political ecology of other pastoral livelihood strategies. For instance, lack of grass elsewhere, caused by drought in 2009, immobilized many pastoralists in a small area of rangeland northwest of Tanout for a year until the next rains fell in 2010. Except for the meager pasture of the area and a small amount of forage (cotton seed, wheat chaff) distributed through a local NGO, overall lack of feed devastated household herds. If the pastoralists had been able to purchase more forage, even straw and grain stalks, they would have sold some livestock to keep the rest alive. Southern villagers, after previous experiences, well understand and profit from this exchange when drought-stricken pastoralists trek south. Market networks are not set up to provide pastoralists with forage in the northern rangeland, however. Moreover, government and development agents still tend to believe that pastoralists refuse to sell their livestock. This inhibits the development of market exchanges that could keep more livestock alive during difficult times.

We also need to advance theory for the sake of improving pastoral development. We need to be able to link household and community economies within

political ecology and global economic narratives; to combine theories now bounded either spatially or analytically to show how economies and cultures connect with ecologies and politics, in a processual, historical way. As anthropologists, we can show how human decisions and strategies relate with global processes. There is much to admire about world-systems theory as a grand narrative, for example, its focus on history, which one can translate (as Roseberry and other Marxist-based theorists recommend) to examinations of the progression of communities through history (Wallerstein 2004:ix). How and why did these communities come to be what and where they are? The metaphor of systems shows how everything connects to everything else, but Wallerstein's definition of a system, as an entity that can operate substantially the same if cut off from other systems, denies economy's (even the capitalist economy) real articulation with and dependence on natural systems. By reversing the reductionism of current world-systems theory through the inclusion of elements from other theories, we might be able to validate and better understand the economic practices of households within "external areas."

Theories such as anthropology of economy (Gudeman 2001), household ecology (Wilk 1997), political ecology, various approaches to household economy, New Institutional Economics, structuration, and practice theories give us bases to work from. Tsing's theory of global connections links rural subsistence producers to activists to state governments to global corporations. She asks, "Can any cause for common justice emerge across these differences?" (2005:245). Then she shows how the differences and connections between groups of people lead simultaneously to both the generalization and the localization of such causes. These differences and connections also lead to social mobilization and change.

So why should one study household economies in an external area? Like the forest-dwellers of Tsing's Indonesia, the pastoralists of the Sahel also "manage their environments [relatively sustainably] through customary rules and practices" (2005:55). Besides mobility, through which they access and manage natural resources, they use marketing and loans to maintain their herds, social networks, and livelihoods. Climate change, population increase, government policy, and outsiders' exploitation of natural resources all threaten the viability of pastoral livelihoods. Moreover, new imported products demand higher expenditures of individuals and households, in some cases for products that were once made locally and less expensively. Decentralization threatens to place new costs on pastoralist households (Marty 2005). Both the Tuareg rebellions of Niger and Mali and a nascent activism among some Wodaabe reflect frustrations with the actions (or inactions) of government and private capitalists. Western development agents and activists also contribute to socio-economic and political

change in various ways, collaborating with either state or pastoralist groups, or between the two. Most pastoralist households, however, struggle against both ecology and political economics with little time or means for activism. They raise their live-stock and participate in exchanges that help sustain their families. Understanding the diverse connections between pastoralists and their neighbors, between pastoralists and markets, and between pastoralists and government/development will not only validate the practices of both pastoralists and their network connections, but will also contribute to the improvement of market investments, economic regulations, and pastoralists' practices in the face of climatic, political, and demographic changes.

NOTES

1. Grants from the National Science Foundation, the Social Science Research Council, and the Graduate School of the University of Kentucky financed my dissertation research. I am grateful to the many people in Niger who always provide invaluable help, as well as to my advisor, Peter D. Little, and my committee members at the University of Kentucky. A version of this article was presented at the New Orleans meeting of the American Anthropology Association on November 18, 2010.
2. I thank Deborah Kapchan for her suggestion that I look at Tsing's work.
3. Although the subject of livestock exchange is rife with gender and generational issues, this article has too little space to do more than mention a few.
4. From *habba* (to tie) and *na'i* (cows). The same word is used for livestock other than cows.
5. Some Wodaabe women milk ewes and a very few milk camels, but both species are well exploited by Tuaregs, and Uda'en Fulbe milk ewes as much as, if not more than, cows.
6. The franc CFA is tied through the French franc to the Euro, and its conversion to the U.S. dollar changes as the euro-dollar exchange rate changes. A dollar during my research period averaged over time to approximately 450fCFA, though it fell throughout my stay in Niger. A rough conversion rate of 500f to \$1 has become a convenient standard. I weighed a standard measure (*tiya* or *tiyawol*) of millet on a shop scale at 2.7 kilograms (just under 6 lbs.).
7. From 50fCFA to 100fCFA = 1 franc français.
8. Southern Katsinen-ko'en experienced other socio-economic transformations.
9. John McPeak and Matt Turner are presently involved in a large market study in Mali that addresses some of the research that I call for here. See <http://www.malibetail.net>.

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