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PASTORALISM IN CONTEMPORARY DEVELOPMENT PERSPECTIVE

by

Dan R. Aronson

In the real world pastoral nomadic societies everywhere are under threat from competitive production and political regimes. In Syria and Iraq much of the herding is now done by dependents of migrants to the Arabian petro-economies. In Western China and Kenya government-sanctioned cultivation schemes are swallowing the best-watered of the permanent rangelands. Models for the understanding of nomadism and pastoralism based on the relativistic assumption of the equal integrity of cases are likely to become only historians' models if what Grigg calls (1974) the "secular decline of nomadism" continues its recent acceleration.

The power and reach of other production systems are such that most change in the pastoral world is of course unplanned. The inflation of Maure bridewealth as a function of wages paid in Mauritanian iron mines (Bonte 1975), the planting of colonies of Han Chinese in Muslim and pastoral Western China (Butterfield 1982:427-429), or the liquidation of Somali camel herds to finance migration to the oil-rich Gulf states may all be understood using theories of large-scale change, from a variety of traditions, that instruct us as to the corrosive effects of massed capital whether in the control of Western or of socialist masters.

From an ideology which contrasts with the view that large-scale change must be unplanned comes the whole tradition of development theory. In its home discipline, economics, development theory was elaborated with post-Keynesian optimism that rational economic planning could guide a more humane future. As an applied and predictive economics it posited that resources could be managed to reach -- more quickly and efficiently -- the goal of "upward and forward" progress (the phrase is from Berger 1976) for any given economy. Scores of thousands of economists, planners, development agency workers and consultants make their living propagating this faith. This paper is meant to demonstrate that anthropologists have a stake in the same faith if pastoralists are to have a real-world future at all. It examines in part the development gospel -- or better, the epistle to the pastoral nomads -- according to one major recent proponent, Hans Jahnke, who was for some years the Chief Economist at the International Livestock Centre for Africa in Addis Ababa, and who has since published Livestock Production Systems and Livestock Development in Tropical Africa (1982). The book is now on the desks of livestock planners in virtually every

country.

Anthropologists have a stake in the development gospel because the only response to unplanned change is to plan change. This is not so obvious as it seems: many an anthropologist is deeply concerned about the fate of the people among whom her or his work was done but still says that those people can take care of themselves. This view is nonsense: in every case that I know of, pastoralism is losing ground. Change will either be unplanned and mostly deleterious to the interests of pastoralists, or it will be planned and at least sometimes less deleterious.

If change is to be planned, then it is too important to leave to the existing development disciplines. Anthropology sees, better than most in those disciplines, the degree to which development economics has been tied to regional, national, and international level planning, with the elements of local economics and social systems being considered as so much inert raw material ("human resources," "target populations," and "potential adopters" are the code-words) to be rearranged and used for more effective higher-level systemic operation (that is, to produce beef, or hides, or foreign exchange, for the Nation). Our standard response as anthropologists to these formulations has been to challenge them at the level of morality, decrying the objectification and victimization of pastoralists (as of other peoples in other situations) as passive objects of "development," indeed, as its "targets." To demonstrate the opposite, we have shown that pastoralists are the worthy subject of their own lives, that they are not leading the immoral life of the "tragedy of the commons" (Horowitz 1979: Institute for Development Anthropology 1980), or being fathers of the deserts. We have shown instead that they have been good managers of their own land, that they were rational breeders, careful naturalists, and obvious conservationists. Because pastoralists lead good lives, we have been encouraging development agencies and governments to do the right things for them, and the institutions cannot be said not to have listened. Given the will of national governments and agencies to spread what has been in the last fifteen years cheaply available development money across the countryside, together with this convergence of developmental and protectionist interests, upwards of half a billion dollars have been spent on pastoral livestock schemes in Africa alone (estimates are in Hoben 1979:1, and in Jahnke 1982).

Yet it seems to me that if we have successfully asserted the common humanity of agency officials and pastoralists (and sometimes we have belligerently asserted the greater humanity of the pastoralists), we have not been sufficiently brutal with ourselves and with pastoralists to answer the hard questions that the development disciplines put to us. They have asked that we objectify our worth and that of pastoralism in whatever terms we would use - that we justify thought, planning and the expenditure

of scarce resources for pastoralism rather than, or at least in addition to, spending for rational peasants, rational artisanal fisherfolk, or rational urban-dwellers. As Jahnke puts it, "the relevant question is not whether livestock plays a social and cultural role, but whether this social and cultural role prevents pastoralists from making the best economic use of livestock. Of this," he says, "there is little evidence indeed" (Jahnke 1982:74).

In a general way the work of many scholars of pastoral production has shown that pastoralists do of course make good economic use of livestock. Sound and durable ecological adaptation does not necessarily equal "best economic use" at each historical moment, but it comes close enough that few of the development projects which have attempted to deal with pastoral systems in situ have come up with anything better (for some recent admissions and analyses see ILCA 1984 on Botswana and the Maasai, and Aronson 1982: chapter 1 for central Niger).

Yet it is just here that the patience of governments for pastoral projects has begun to run out. In his chapter on range livestock production systems (his term for what anthropologists generally call pastoral nomadic systems), Jahnke goes carefully through the whole gamut of activities that have been pursued in pastoral projects. Looking at the development of water supplies, veterinary campaigns, grazing schemes, ranch creation, associational formation, marketing schemes including stratificational production designs, and technical livestock improvement programs, he finds, as anthropologists might well have thought a priori he would, that pastoralists manage all of these issues so relatively well that there has been little room for improvement. The lack of significant payout to investment in livestock has been amply shown in two full generations of failed projects (in Africa), from the Ankole and Markoye ranch projects of the early 1960's to the more sophisticated and complicated Kenya Livestock, Mali II, and the two Somali Rangelands Projects of the late 1970's and early 80's.

The conclusion that Jahnke comes to after reviewing the results of all these pastoral project interventions is not to congratulate anthropologists and pastoralists for having taught him so much about the efficacy of existing production systems. Rather, he grows pessimistic that more than marginal increments in production can be made in these systems, and so he advises that investment move out of range livestock systems to other more economically interesting areas for livestock improvement. Indeed, he says that "pastoral systems are production systems in a waiting room of development...development must be expected to set in elsewhere. Meanwhile...the policy-maker is held to relief measures to avoid catastrophes" (p. 103). He even goes so far as to say that the destruction or collapse of traditional livestock systems, however painful, may be bearable, since

"even a cursory look at the process of economic development in today's industrialized countries and at the experience in the developing world gives little indication of 'painless' and 'organic' processes...Disruption of production systems, collapse, human misery and large-scale dislocation of people stand alongside...extremely rapid rises of production and productivity and accumulation of wealth in other areas, possibly within the same country." He adds ominously that "countries can hardly afford to lose development opportunities that certain production systems provide or waste resources on others without development potential" (p. 223).

The danger that Jahnke's conclusion poses is very real. Investment in high-productivity projects may lower unit costs of livestock production to the point where extensive range producers can no longer compete (the recent dramatic inroads of Australian mutton to the Saudi market formerly supplied by Somalia and the Sudan, or the earlier inroads of Argentinian beef into coastal West Africa, are two major cases in point). If the costs of labor and feed were in the past low enough to withstand competition from intensive schemes, they may now or soon not be enough, given the growing opportunity costs of the long-regime extensive feeding programs which characterize pastoral systems. Pastoralists nearly everywhere are migrating without their herds, to labor markets where their earnings are much higher than at home.

Jahnke's pessimistic conclusion must therefore be challenged on its own terms, lest it become the expert justification for the malign neglect of pastoralists that has anyway already begun elsewhere, especially in the international donor agencies. The flaws in his presentation are at two major levels: the data he presents and his theoretical framework.

First, his evidence is inconclusive. His case for pastoral stagnation is buttressed by his assertion that pastoral areas already suffer from "acute overpopulation" (and so, he at least implies, they need at least partial clearance to reconcile rational strategies with available resources). He calculates a maximum human population by dividing the caloric equivalent of total livestock production by the 2300 kcal average adult daily requirement. This quotient, which he calls the "Human Supporting Capacity" (HSC), comes to 17 million people for "arid East and West Africa." With 20 million pastoralists in these zones by 1980, there is - presto! - "pastoralism under [Malthusian] pressures" (p. 89).

Jahnke's argument for overpopulation is purely tendentious. He allows that his assertion holds "if the population is to subsist on livestock alone" (p. 88), a condition he earlier

suggests is rare but which he uses anyway to conclude his case for "pressure." But by his own figures earlier set out (pp. 81-82), herders commonly sell about two-thirds of their livestock products, and for each kilogram they sell they receive 7.5 times as many calories in grain. So if one "average" Tropical Livestock Unit (TLU) in a mixed herd can yield 152 Million calories (Mcal) (calculating livestock product calories alone), then the retention of 30 percent of the product for food (providing for more than enough protein) would yield 45.7 Million calories and the sale of a further 40 percent of the product for food-grains would yield another 456 Million calories to the pastoralist (.4 x 152M x 7.5) and still leave 30 percent of the product to be traded against non-food items. And if a single TLU in a mixed herd, the products of which are marketed in an average manner, can thus produce for its owner/manager 501.7 Mcal (45.7 + 456), then the real-world Human Supporting Capacity of 100 TLU is 59.7 people (at 2300 kcal per day or 840 Mcal per year), or 3.3 times the population that Jahnke allows for by manipulating his own data (note that all the factors here, of grain-equivalents, yields, and nutritional needs came from Jahnke himself). By his own figures, then, "arid West and East Africa" are underpopulated in human terms, and no Malthusian human crisis is at hand. The limiting condition for HSC is effective animal nutrition, by which I mean both nutritional resources and the epizootic and management conditions wherein they are converted to livestock product: these factors are subject to improvement.

The same critiques of his use of his own data can be made of Jahnke's pessimism as to the value of what he calls only "marginal" productivity increases. Given the number of livestock enterprises in countries with extensive pastoralism, production and productivity increases of 10-15 percent, an extra three to five kilograms on a marketed sheep or goat, for example, or the better preservation of a few more kilos of dairy product from herd to market, may well be justified if the investment to obtain them is low and/or induced from the producers themselves. Or, to take a third issue, we have no calculations by Jahnke or by others of the tolerable trade-offs between long-term gestation of results from enhancing pastoral systems and short-term, especially project-cycle returns, from investment in more intensive livestock activities. These trade-offs are obviously both economic and political, and the more general debate in the development literature recently (e.g., Streeten, 1981), on the long-run payoffs of "basic needs" strategies reminds us that project cost-benefit analyses are not the only measures of success in the livestock of any other sector.

The second level at which criticism of Jahnke's developmentalist approach to pastoralism is subject to criticism is more fundamental than these gaps in perspective and arithmetic that I have so far cited. In positing his review of range livestock systems on the assumption of their contribution to national production, Jahnke attaches himself firmly to a waning ideology of undifferentiated development, of seeing the state as

rightful beneficiary of development even in the face of the nearly universal finding that development launched toward that goal means development skewed in favor of the urban and ruling elites of the society. This development ideology applied to pastoralists is attractive to governments, of course, because it means both that the politically potent will have privileged access to inexpensive protein and that government will derive relatively easily a substantial tax revenue from fewer, more controllable agricultural enterprises such as ranches or feedlots.

Nevertheless, recent development theory itself has begun to look further at the distributional aspects of alternative policy choices. The elaboration of distributional theory has been a function of many countercurrents, including domestic poverty policy in the U.S. in the 1960's, the rise of Marxist underdevelopment theory, and the political distaste that grew for foreign aid projects that merely built monuments to prestige or vanity. (We have Michael Harrington, André Gunder Frank and René Dumont to thank for their influence on the development policy choices and the development economics of the 1970's and 1980's.) In general, the new development theory orients toward raising the incomes and the welfare of the lowest-earning segments of society. Such brands of it as Basic Needs theory argue that attending to the problems of the poorest portends a somewhat longer gestation of fast economic growth rates but then steeper and more sustained growth than by the conventional quick-return methods that Jahnke stands for.

To see pastoralists in the light of such an orientation is above all to realize that investments in pastoralism is in small-scale rural producers who are mass distributors of protein to, among others, some of the poorest members of society. To the degree that the distribution system is in place and that long-term increases of protein are desirable nutritionally for the health status portion of a mass-based development process, we need to elaborate the mechanisms that will guarantee the durability and expansion, not the demise, of pastoral production systems based both on range exploitation and on mixed agro-pastoralism.

In the pursuit of a future for pastoral production, then, what must be stressed are the very features of pastoralism that anthropologists know best: its support of large populations, the intricate networks that bind it to non-pastoral consumers, the points where it can admit of marginal productivity increases in its own terms, the ways it can be threatened and undermined. But to do so we must undertake a revamped agenda which gives less prominence to peasant rationality and to elegies to the supposed external successfulness of systems cast out of history into the ethnographic present.

Specifically, we need an anthropological agenda which is prepared to document and fight for the ways in which these social and cultural systems can continue to produce effectively in the cold light both of high urban wages and the rising world demand for livestock food produce. On this agenda the following items are bound to be of key importance:

(1) First, research is vital on the actual and changing costs of producing specific pastoral products (not just food but animals for traction, feeding, or other uses) in many specific systems, so that we know the parameters of competition in factor markets and the tradeoffs among various factors in the production mix. Recent work from Botswana, for example, demonstrates that production per hectare is considerably higher in range livestock systems than in ranching systems (and thus again that more people can be supported on the same amount of land in the supposedly less sophisticated but in fact more intensive system). But in Somalia, sons of the northern pastoralists, made anthropologically famous by Lewis (1961), are selling off the camel herds central to their self-definition (!) for the money to buy a ticket to join the laboring classes in Saudi Arabia.

(2) Second, we need to document the relationships between levels of centrality of decision-making and the effectiveness of production. Time and again pastoral "planning" attempts to take over decision-making, on herd mixes, stocking rates, or feeding regimes, from pastoralists. Yet even in the most sophisticated centrally planned economies, many such grazing and husbandry decisions are left to the herders, for example the work teams of Mongolian negdels (Humphrey 1978). On the other hand, key decisions in Lebanese herding families are sometimes made by urban family heads and relayed by radio or by truck trips to herders in the desert (see, e.g. Chatty 1980). What management decisions can be made only on the spot, or what are the consequences for social cohesion and for production of separating daily herding chores from decisions whether by settled family leaders, absentee animal owners, or distant bureaucrats? To increase living standards for those left on the rangelands, which elements of production must be yielded, and which can never be yielded to outsiders?

(3) Third, anthropologists must be able to cooperate in the search for new technologies for the conservation and storage of dairy products. The remoter the pastoral area from points of consumption or transformation, the more necessary it is, if incomes are to rise, to find new ways not only to augment production but to preserve produce for transport and sale elsewhere. Given the ecology of pastoralism, this means especially that we need to find new ways to store and new uses for the produce of camels and goats. Their owners are obviously not immune to the lures of an external economy simply because they tend to live in the remotest areas of contemporary nation-states.

(4) Fourth, a great deal more research and experimentation must go into the issue of marketing the animals of the arid zones. Programs of "stratified production" have contemplated building a marketing chain that feeds animals more intensively as they approach final consumption points, but such programs have rarely addressed the social questions of who is to profit from the value added at different stages of such chains (the Senegalese SODESP organization, which conceived the retention of pastoral ownership of animals in agricultural zone feedlots, needs evaluation in this light; for a discussion of Niger see Aronson 1982). In many places more intense marketing than ever before is now taking place. Often it is led by the rural producers' own kinsmen, whose actions may be leading to either new forms of organization or of stratification (for the Somali case, see Swift 1979 and Aronson 1980). Unless marketing chains and the political economy of trade networks are analyzed and clearheaded policy elaborated, production increases of substantial magnitude may yet have little real effect on herders' incomes.

(5) Fifth, and perhaps most important, anthropologists, economists, and legal experts must confront the linked problems of land title guarantees and land use planning. In most places including those with centrally planned economies, increased demand for land by non-pastoralists together with planning institutions set up by the state have been de-pastoralizing former rangelands at an alarming rate. High rates of encroachment belie the comfortable argument made by some anthropologists that pastoralists will survive because their lands are too "marginal" for other users to covet. In turn apologists for sedentarization measures and for the inevitability of encroachment argue that land use succession is merely an indication of the higher value to be accrued for a given piece of land by putting it to agricultural uses, say, than by leaving it as range. Such arguments, implicit in the tacit support given to agriculturalists by political processes in Niger and Kenya, for example, or explicit in the case of irrigation planning in Senegal and the Sudan, are hardly founded in good economics. The costs to total pastoral systems of the loss of key resources (river access or crucial dry season pastures) are not often calculated, while the gains from the more quickly-developing new technology of crop farming are unfairly and short-sightedly measured against pastoral technology which may be only temporarily lagging. But because the power ranged against herders is as much political as economic, the arguments in defense of pastoral peoples must also be made at the level of social and human rights (see Galaty and Aronson 1981). So far, hunting and gathering minorities of what has become known as the "Fourth World" have had much more success in putting their cases onto the international social and political agenda than have pastoralists. Over the long run it is likely that rights to historic national homelands will be claimed at high political cost to states and governments, regardless of losses sustained in specific cases. That being so, calculations of such costs should rightly be brought into a more realistic "development" planning

process.

I would not dispute Hans Jahnke's general conclusion that productivity gains to range livestock systems, like other systems, are most likely to come from long-run capital intensity, nor that the consequences of capital intensification are likely to render a large proportion of the laborers in current pastoral systems superfluous. Indeed Chinese economists have recently been suggesting that three-quarters of China's peasants could be removed from the land without loss to agricultural productivity. But the obvious ludicrousness of a Chinese development policy which stopped investing in peasant agriculture is instructive for the African case discussed by Jahnke. Development policy is not a matter for specialists working on sub-systems in isolation, but a crucial international dialogue in political economy that must remain totally visionary in its openness to whole-systemic change. It is just this holism of contemporary development theory that demands contributions by anthropologists. Economists who argue for the utility of blinkers to see into subsystems and then make recommendations for whole systems are not being true to theory, and anthropologists who argue for the utility of freeze-framed portraits of "their" people are not (any longer) being true to life.

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