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RESERVE

INSTITUTIONAL CHANGE AND THE QUALITY OF LIFE;
TWO DECADES OF ECONOMIC TRANSFORMATION IN
A RURAL COMMUNITY

By

JEAN ENSMINGER

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INSTITUTE FOR DEVELOPMENT STUDIES
UNIVERSITY OF NAIROBI
P.O. BOX 30197
NAIROBI, KENYA

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CHANGE AND THE QUALITY OF LIFE;
OF ECONOMIC TRANSFORMATION IN
A RURAL COMMUNITY

ABSTRACT

This study utilizes insights from the new institutional economics to understand the endogenous demand the Orma are suddenly experiencing for institutional change. A number of factors in their environment have created pressure for new contractual arrangements and new property rights, which in turn have necessitated that the Orma draw upon the institutional resources of the national government to provide third party monitoring and enforcement. According to the theory, if such institutional change does indeed lead to decreased transaction costs for the Orma and more efficient allocation of economic resources, the stage could be set for a period of economic growth, even in the absence of technological change. As such processes are undoubtedly underway in many other societies all over the developing world, this study should have important general implication for economic development.

What makes this an unusual case study is the existence of a large quantitative database for the period just before the most recent institutional changes. Together with the restudy, these data will afford the rare opportunity not only to document the extent of changes in production, consumption, and social structure, but to actually measure their impact upon the quality of life of the population. As there appears to be widespread ideological support for the institutional changes, it proposed that they have benefitted a large sector of the population. The analysis will provide specific data on the extent to which this holds for all sub-sectors of the population and all measures of the quality of life. The data will also indicate the strength of specific relationships between important economic, nutritional and health variables, thus allowing government policy planners to more effectively allocate scarce resources to social services.

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INTRODUCTION

The last two decades have brought tremendous economic change to the Orma people of Tana River District, Kenya. The 1974 and 1984 droughts hit this pastoral area particularly hard and resulted in very high livestock losses. This period also saw the alienation of large tracts of Orma land to commercial ranches, irrigation schemes, and game reserves, which compounded the resource constraints of an also rapidly expanding population. However, it is not so much from these exogenous changes that we may draw general implications for the study of economic development, rather, from the way in which the Orma have responded to them. The crisis precipitated by these factors, especially at the time of the 1984 drought, propelled the Orma into unusually rapid and innovative socio-economic change. Among the outcomes have been considerable economic diversification and increase in trade and the specialization of labor. Consequently, the Orma economy, which was two decades ago almost exclusively livestock-oriented and geared predominantly to subsistence production, is now both quite diversified and extremely commercially-oriented. Especially interesting to the social scientist, is the way in which these economic changes have led to increased demand for new political, legal, and social institutions. This period of Orma history has resulted not only in the transformation of production and consumption, but of the very social structure of the society. It remains to be seen what effect all of this has had upon the quality of life of the population.

The proposed research is first, a study of economic and institutional change, especially emphasizing the period between my first study of the area (1978 to 1981) and the current one (1987). Effective national governmental institutions and services (administration, courts, police, taxation, schools, transport, health facilities, famine relief, veterinary and agricultural extension) arrived late to the Orma. It is important to emphasize, however, that this was not merely due to the fact that Tana River District is a remote area with historically poor infrastructure and logistical problems, but also because until recently the Orma exerted relatively little demand for such national institutions and services. This has changed dramatically in the last five years. In this part of the research I shall focus upon the economic and political factors leading to the supply of and demand for specific types of institutional change, the conflicts among interest groups favoring different institutions, and the manner in which widespread consensus and public support for institutional change was engineered so as not to violate the ideological underpinning of institutional legitimacy.

A second focus of this research is an evaluation of the impact of these institutional and economic changes upon the quality of life of the Orma. Here, longitudinal analysis of economic data (especially wealth and income distribution, individual time allocation, and household budgets), nutritional, morbidity, and mortality data is possible by comparing a large quantitative database gathered in the 1978 to 1981 study, to data from the same households in 1987. This portion of the study will allow for an unusual evaluation of the impact of institutional and economic change upon different subsets of the population. It is expected that comparisons between rich and poor, old and young, men and women, male and female headed households, and those near and far from administrative centers, dispensaries, and markets, will provide particularly interesting longitudinal and cross-sectional comparisons.

THEORETICAL FRAMEWORK--PART I

The theoretical framework which influences this study is that associated with the new institutional economics. This school of economics is distinguished from the more conventional neoclassical approach by its emphasis on the relationship of institutions to economic development. Institutions are defined as "political and legal structures, norms of behavior regarding contract fulfilment, honesty, and effort" (Wallis and North 1986:6). As the study of institutions of one sort or another is the subject matter of most of the other social sciences, but has been virtually neglected in neoclassical analyses, this attempt by some economists to given prominence to institutions is most welcome.

The institutional economists also critique some aspects of neoclassical economic theory which have been particularly problematic to other social scientists, especially those working in the Third World. The following passage is an example of the general critique of economics brought by proponents of the institutional approach (Langlois 1986: 3):

... economics is too narrow a field and should include more ideas from philosophy and from the other social sciences; ... economic phenomena should not be analyzed solely in terms of static equilibria but as processes with a history and a future; ... economics should be a more 'evolutionary' science...

More specifically, three of the issues with which the institutional economists have dealt in depth will be considered here: transaction costs, property rights, and the role of ideology in maintaining the economic system.

While the institutional economists accept the insight of Adam Smith that gains from trade are key to economic growth, they do not accept that such gains are automatic or costless (North 1985: 2). Societies may not benefit from trade if the "transaction costs" incurred in the process of exchange outweigh the benefits of that exchange. These costs include those of measurement, information, negotiating and enforcing contracts, and monitoring principle-agent relationships (Wallis and North 1986: 25). It is exactly these costs which governments reduce by clearly specifying property rights and providing third party enforcement of those rights. These economists maintain that economic growth, or expansion of output, comes not merely from technological change, as has been the emphasis in most neoclassical analyses, but may also derive from institutional change, which reduces transaction costs.

These insights may have particular relevance to developing societies, where appropriate technologies are either unavailable, or prohibitively expensive. In such situations, institutional change may offer more promise as an engine of economic growth. I would argue that this is especially the case in pastoral societies, where even more than in farming societies, cost effective technological improvements on traditional production systems have been almost non-existent.

A large segment of the research among institutional economists has focused upon the effect of different types of property rights upon economic growth. Thus, North and Thomas (1973) make the case that the superior growth realized by Holland and England between 1500 and 1700, as compared to that of France and Spain in the same period, can be attributed to the more privatized property rights which evolved in the former countries. However, this does not mean that privatization of property rights in all contexts will necessarily increase economic efficiency. The transaction cost literature explains why many other forms of property rights (including the commons) exist, and may be the most economically efficient rights given the relative prices and transaction costs associated with a particular institutional structure. If the costs of monitoring and enforcing more restrictive rights can not be offset by the economic gains, then privatisation is not economically rational (Nugent 1986: 27). As these ratios change (perhaps through population pressure, relative price changes, or technological change), one might well expect to see increased demand for a different set of property rights, and these are several ways in which endogenous demand for institutional change may be generated (cf. Hayami and Ruttan 1986).

Another welcome modification of the neoclassical approach by the institutional economists is the attention paid to the role of ideology in economic behavior. North (1981) stresses the way in which ideology may reduce transaction costs in the enforcement of property rights and contracts. If members of a society generally subscribe to the justice of a particular set of property rights or contractual arrangements, these may be largely self-enforcing. Cheating and shirking can be expected to be less of a problem than, for instance, in a situation where property rights have been recently altered by powerful interest groups to the detriment of some portion of the society. In the latter case, because the new rights lack broad-based ideological support, the transaction costs involved in monitoring and enforcing them may be high. In extreme cases, ideology may also drive people to collective action (Nugent 1986).

In a similar line of reasoning, North (1985:8) explains why the transition may not be easy from systems based on personal exchange between parties well-known to each other and engaged in repeat dealings (which predominated throughout human history and still do in much of the developing world), to systems based on impersonal exchange enforced by third-parties.

Institutional analysis is ~~not~~ ~~base~~ the study not simply of the rules of the game but of the individual responses to such rules. While the rules may change overnight, individual responses will be much more complex and slow to adopt. Changes in rules require the evolution of norms, conventions, and informal codes.

Furthermore, North (1985:7) explains why movement toward more economically efficient institutions and property rights may not be unilinear:

The answer is quite clear. The breakdown of personal exchange is not just the breakdown of a dense communication network but is the breakdown of communities of common ideologies and of a common set of rules that all believe in. The rise of impersonal rules and contracts means the rise of the state and with it an unequal distribution of coercive power. This provides the opportunity for individuals with superior coercive power to enforce the rules to their advantage, regardless of their effects on efficiency. That is rules will be devised and enforced in behalf of the interests of the politically advantaged but they will not necessarily lower the costs of transacting in total.

In the following section I discuss the relevance of these ideas to the study of economic change among the pastoral Orma of Tana River District, Kenya.

Application of The Theory to the Research Population

The Orma provide a particularly interesting case for the study of institutional change. Even by the beginning of this century, the social structure of the Orma had altered considerably from what it once was. Although the Orma are still today patrilineal, predominantly patrilocal, and highly polygamous, they have lost many of the strong corporate institutions which they once shared with the Ethiopian Boran and which one typically finds among East African pastoralists. For instance, they so long ago ceased to practice the Gada age grade system and moiety exogamy, that young Orma today do not even recognize the terms; a once strong institutional structure of Chiefs and councillors also disappeared before this century, along with the legendary military might of the Orma, who at one point dominated most of eastern Kenya. Although patrilineal clans are still recognized, they are losing significance yearly. For example, since my last study of the Orma in 1981, clan exogamy has been abandoned. Intra-clan marriages are common enough now to go unremarked.

Historically many factors played a role in the dismantling of the Orma institutional structure of a century ago. Most obvious are the devastating wars with the Somali, Kamba, and Maasai in the latter half of the last century and European colonial domination by the turn of the century. If current change is any guide, however, it is likely that endogenous forces also played a role in the demand for new institutions to meet new conditions.

Despite the long history of radical institutional change among the Orma, the changes of the last decade are no less profound. During this period the Orma have to a considerable degree accepted the authority of national governmental institutions as third party enforcers of transactions which increasingly take place between people of no kin relationship and perhaps not even of previous acquaintance. Thus, together with much of the developing world, the Orma are making the transition to forms of economic organization no longer dependent upon the limitations of kin and face to face contact. This is reflected in increased dependence upon hired herdsmen (including non-relatives), the opening of new livestock markets in areas previously unsafe for travel, the expansion of credit, and even willing submission to the national taxation system (here largely

in the form of harambee contributions). The latter, of course, comes with the expectation of a proliferation of the services afforded by this tax structure--schools, health facilities, famine relief, veterinary and agricultural extension.

Another major change for the Orma today regards property rights in land. As is true of most pastoral peoples, the Orma have traditionally shared communal grazing lands. In recent years, however, the open access of the commons has been gradually broken down by the Orma themselves, as they have imposed more restrictive property rights over large territories surrounding permanent villages (see Ensminger and Rutten 1987). Far from an isolated phenomena, this trend has been documented in many other pastoral areas across Africa (for the Kenyan Boran see Hogg 1987 and Oba 1987; for the Turkana see Broche-Due 1987). Given this movement toward greater privatization of property rights among the Orma, it is not surprising that we also find considerable endogenous demand for institutional change to better monitor and enforce these rights.

Part of this project will be an investigation of the forces which precipitated institutional change and the processes by which this transition was effected. It is expected that all of the following have been significant in the demand for institutional change: changes in relative prices (thus increasing potential gains from trade and the specialization of labor), population pressure (affecting the cost-benefit ratio of different forms of property rights in land), and the devastation of two droughts which pushed people to innovative economic diversification. Part of the pressure to alter property rights (in particular the dismantling of the commons) may have come from interest groups which benefitted from recent economic change and desired to protect their gains. The need to reduce the transaction costs involved in the increased level of exchange and specialization of labor are certainly also significant factors. People may have accepted that these new rights and contracts were enforceable only with the use of the third party institutions of the national government.

Needless to say, such changes have not been accomplished without the creation of winners and losers. Changes in property rights in land, for instance, almost invariably create some losers. However, by timing land tenure changes to coincide with droughts that resulted in heavy livestock losses, the "winners" probably met less resistance than would have

otherwise been the case, as the "losers" had already lost most or all of their herds. Convincing people to forego resource rights which might be useful in the future is far easier than taking away resources essential for their current subsistence.

Another group of "losers" are those who held the previous institutional positions, namely the elders. Submission to national institutions means the alienation from the senior elders of many political, executive and judicial powers, as the jurisdiction of the government appointed administrators, soldiers, and national and Islamic court systems, are increasingly recognized. However, people have multiple interests, and many of the "winners" and beneficiaries of the new property rights and lower transaction costs are those same elders. They may well have made a calculated choice to yield authority to the governmental institutional structure because the economic rewards to them were deemed sufficient.

According to the theory presented above, were there not widespread consensus among the Orma for new institutions, thus ensuring their ideological legitimacy, the transaction costs of enforcing contracts and property rights would be extremely high due to cheating and shirking. As is the case in any society, there are numerous cases of imperfect compliance among the Orma today. Yet on the whole, one would have to say that the new institutions appear to be working. It is proposed, therefore, that the recent changes do not merely represent a "coup" on the part of some small sub-set of elite Orma who saw the opportunity to redefine the system to their advantage. It is more likely that they reflect a fundamental restructuring of society which is either advantageous, or at least neutral, to a fairly broad-based constituency, and therefore may have important general implications for economic development. In other words, it is hypothesized that these changes have brought more benefits than losses to a large cross-section of the Orma. The extent to which even a small minority may have unduly suffered, is nevertheless an important question for research.

The remainder of this paper deals with the relationship between institutional change and the quality of life of the Orma.

THEORETICAL FRAMEWORK--PART II

Where this research departs from the usual investigations of the new institutional economists, is in addressing the impact of recent economic and institutional change upon the quality of life of various segments of the population. While economists (including the institutionalists) are more inclined to view economic growth as an end in itself, other social scientists are more apt to begin from this juncture and ask what consequences growth may have for the society, especially the least privileged. In this project the two investigations are combined.

A large literature spanning many social science disciplines and going back at least as far as Lenin (1899), has analyzed the effect of commercialization upon economic differentiation of the peasantry. Such discussions were especially intense in the last decade (see in particular issues of the Journal of Peasant Studies, and analyses of the green revolution). A common finding of many such studies is that the benefits of growth are far from equally shared, and may actually worsen the circumstances of some segments of the society. Indeed, the author's own previous research found that the early expansion of commercial production among the Orma, coupled with drought in the 1970's, led to considerable inequality in the distribution of wealth, which after four years of recovery showed little sign of reversal (Ensminger 1984).

Far less studied and documented, are actual outcomes of wealth and income inequality on quality of life measures. This research proposes to contribute to this gap by analyzing the effect of economic and institutional change over the last decade on the measures which one could argue have been only crudely approximated by overattention to wealth and income differences.

While relative economic inequality is extremely important for many reasons, not the least of which may be its effect on ideological support for institutional structures (as suggested by North 1981), differences in quality of life measures can be argued to be of more immediate relevance to the population. Here I refer to nutrient intake, morbidity and mortality rates, anthropometric indices for children and adults (male and female), freedom from both seasonal food insecurity and that resulting

from inadequate markets, access to health facilities (including childhood immunizations), length and physical strenuousness of work week, women's equality in relation to men (including protection from physical brutality), equitable treatment in taxation, and equal justice before the legal institutions. It is entirely possible that quality of life measures vary independently of each other and of economic inequality.

In conjunction with institutional changes, the Orma economy has undergone tremendous diversification in the last two decades, but most especially in the last five years. While the Orma are still primarily cattle pastoralists with lesser numbers of small stock (sheep and goats), one now finds a majority of households involved in one or more of the following activities: farming, retail trade, livestock trading, wage labor in the civil service, restaurant ownership, herding for pay, digging and selling of building stones from a large local quarry, and casual labor of many sorts (especially in the construction of buildings and roads). A central question of this research, therefore, is whether or not economic diversification has succeeded in raising the incomes of the poor such that they have realized improvements in their quality of life, even if they have not been able to close the wealth gap.

Given that there is considerable broad-based ideological support for the new institutions, it is hypothesized that quality of life measures will show improvement over time as well as cross-sectional variation, with those near administrative centers more favored.

QUANTITATIVE METHODS

Much of the quantitative data to be collected in the current project will be gathered using techniques and survey instruments perfected in the original study between 1978 and 1981. At that time a sample was defined geographically. A territory thirty-two kilometres east and west and twenty kilometres north and south was chosen around the market village of Wayu, the geographical center of both Tana River District and the Orma population. This method of sample selection was necessitated by the then considerable level of nomadism among the population and the lack of any previous household census from which to draw a random sample.

An attempt to carry out a baseline human and livestock demographic survey of the entire population resident within this area in 1979 netted

159 out of the total of 224 households. A household is defined primarily as a residential unit, following Orma usage. It consists of that group of people who share in the produce of a common herd, but only one of whom has authority to sell livestock. This six-part survey included household level and individual data. For each household the following were collected: a family genealogy, stock holdings before and after the 1974 drought, current (1979) holdings of cattle, sheep and goats, and a five year history of farming activity and yields. The following data on individuals were gathered: age, sex, relationship to household, marital status, education, occupation, and residence.

From this baseline census, sixty-five households (all of the residents of three representative villages) were selected for the monitoring of recurrent economic data over the course of nine months in 1980. Among those surveys, the ones which will be repeated and used as a base of comparison with the new data include: individual time allocation, food consumption by kitchen, and household budgets. Every five days data were collected on time allocation (using a random visiting technique popularized by Johnson 1975). The time allocation data alone amounts to 14,000 individual observations of all age/sex categories, providing a detailed profile of time spent in domestic, leisure, herding, and all other activities, including illness. At the same time a twenty-four hour recall method was used to record food consumption for each kitchen within the household. Every fifteen days data were collected on household budgets (including details of all expenses by item and income by type). The food consumption and budgetary data provide a cross-check on data quality, as expenditures by food item can be compared with reported food consumption.

In the current project all of these surveys will be repeated, but with some additions to better capture health indices, and with some modifications in the frequency and breadth of surveying based upon knowledge gleaned from the first study. As was the case in the original survey, four native-speaking research assistants will be responsible for the bulk of the quantitative data collection.

The original design of the baseline human and livestock demographic survey will remain virtually the same, as will the sample site. This will allow for the creation of a very powerful longitudinal database, which among other things will provide exceptionally accurate information on immigration and emigration to and from the area, wealth of individual

households over time (including stock losses in both the 1974 and 1984 droughts), precise mortality data from the period between the 1979 and 1987 surveys, and accurate measures of change in the level of education, degree of child fosterage, nomadism, and involvement in wage labor and economic activities other than livestock. In addition to the original demographic dataset, I will also collect individual height/weight measures, vaccination histories (begun since the original study), self reports of current health, and presence or absence of breastfeeding for women and young children.

The frequency of the recurrent surveys will be reduced to reflect the greater time constraints on this project (eight months as compared to two and a half years in the initial study) and because it is deemed possible to do so without unduly biasing the results. However, the breadth of the recurrent surveys will be expanded to include approximately 130 of the baseline households (1200 individuals) from six of the nine villages currently occupied. Approximately six survey rounds of these households will be carried out. Although it will not be possible to spread these over the course of an entire year, the timing is designed to ensure that both wet and dry seasons are representatively sampled for all households. One addition to the time allocation survey will be a self report of current health status, thus providing numerous health reports for each individual across the seasons.

Together, these data will provide an unusual range of quality of life measures spanning nearly a decade. These include: income, wealth, nutrient intake, morbidity, mortality, anthropometric measures, length of work week, and strenuousness of labor. In particular, the mortality data should be of unusually high quality, as the new census can be compared to the old to double-check that all deaths of individuals born before 1979 are recorded.

QUANTITATIVE DATA ANALYSIS AND RELEVANCE TO POLICY FORMATION

Of particular interest in this investigation will be the degree to which economic diversification and institutional change (which has resulted in the provision of expanded services such as education, health facilities, childhood immunizations, famine relief, veterinary and

agricultural extension), have offset the negative impact economic growth has had upon income distribution. Multiple regression techniques will be used to test the independent effects on quality of life measures of a large range of variables.

A major research focus of this project is to investigate whether poverty or other variables related to economic and institutional change are stronger predictors of quality of life measures. For instance, do poorer households living nearer the administrative center and thus having greater access to diverse forms of employment and government services, compare more favorably on quality of life measures than wealthier households living further from these opportunities? Similarly, all other things being equal, what effect has parental education had upon these indices for both the parents and their dependents? For example, does higher education facilitate more effective use of health inputs, as proposed by Grossman (1976)? Does home time of either parent, which may have been reduced by new economic opportunities, affect their dependents' quality of life? Have changes in herd structure (especially the loss of sheep and goats due to labor constraints) adversely affected nutrient intake within the household? To what extent does economic diversity within the household, especially the presence or absence of farming, affect nutrient intake and health outcomes? What extent does economic diversity within the household, especially the presence or absence of farming, affect nutrient intake and health outcomes? What effect do the considerable differences in population density among the survey villages have upon health? How might all of these effects differ for children versus adults and males versus females?

One of the most important contributions of this study to policy will be to add further data to the debate over the effect of income and expenditures upon nutrient intake. The World Bank (1980:59), for example, suggests that such elasticities are fairly high:

There is now a wide measure of agreement on several broad propositions. Serious and extensive nutritional deficiencies occur in virtually all developing countries, though they are worse in low-income countries...

Malnutrition is largely a reflection of poverty: people do not have income for food. Given the slow income growth that is likely for the poorest people in the foreseeable future, large numbers will remain malnourished for decades to come.

The most efficient long-term policies are those that raise the income of the poor...

In contrast, Berg (1970, 1973) and Reutlinger and Selowsky (1976) suggest that nutrient elasticities with respect to income are much lower. Empirical estimates range considerably (Behrman and Wolfe 1984 summarize most of the available estimates). It has even been suggested that income elasticities of nutrient intake are inversely associated with income levels (e.g. Pinstrup-Anderson and Caicedo 1978; Timmer and Alderman 1979; and Eutlinger and Selowsky 1976). If it is found that elasticities in nutrient intake are not highly associated with income among the Orma, at least three explanations can be explored. (1) Food composition may change sufficiently with income to place more value on non-nutritive food characteristics so that nutrition elasticities are much smaller than food expenditure elasticities. In the Orma case, sugar consumed in large quantities in tea, is an example of such changing taste preferences. To the extent that wealthy households have a greater tendency to replace more nutritious foods with sugar, such an effect could occur (cf. Dewey 1981: 172). (2) It is possible that traditional redistributive networks are mitigating the effects of income inequality in the form of cash or food subsidies to poorer households. (3) It may be the case that even the incomes of poor households are adequate to meet nutritional demand.

Longitudinal comparison of the demographic data between the two studies will sift out a number of social structural changes which may be traceable either to increased economic inequality, or to institutional change. In particular, women are turning more frequently (and with considerable success) to the courts rather than the elders for resolution of domestic disputes including: rejection of arranged marriages, refusal of widows to be inherited in levirate marriage, and divorce (cf. Kelly 1987).

Some examples of the social structural changes I expect to find are: larger family size (both as a result of increased fertility and decreased mortality, but also due to household reorganization); higher rates of child fosterage (affected by increased economic inequality); increased number of female headed households (due primarily to the refusal of widows to be inherited in levirate marriage); higher rates of divorce and remarriage (probably representing increased success of women in the courts, but also a reallocation of women to those households remaining with more economic resources following the drought); and higher polygyny rates,

especially among young men (probably most marked among those who fared well during the drought or have alternative income sources). If these or other social structural changes are borne out in the data analysis, it will be important to test their effects, especially for women and dependents.

In some cases there may also be significant intra-household variation in nutrient intake, anthropometric measures, morbidity, mortality, and strenuousness of work. For instance, does the profile of fostered children bear more resemblance to that of the households into which they were born (usually very poor), or those with whom they reside (often quite wealthy)? Does marriage order, age of wife, number of women within polygamous households, or age/sex composition of a woman's children, affect either her own or her dependents' individual characteristics?

Given the length of time between the original and the follow-up studies, it is possible to test an issue of relevance to national agricultural, nutritional and health planning policy which is not easily investigated without such a longitudinal perspective. This is the effect of changing agricultural prices and relative grain to livestock prices upon nutrient intake and health. As the government of Kenya has recently taken steps to reduce the price controls on meat, this study can provide some quite immediate feedback on the effects to producers of this important policy change.

Finally, the large database on current health of individuals and their time allocation, allows for an analysis of the effect of health upon labor productivity. Furthermore, as the distance of the survey villages from the dispensary is nicely stepped (at 0, 4, 7, and 15 kilometres), it will also be possible to gauge the effective catchment area for different types of ailments. Together with the labor productivity data, it will then be possible to compute the real costs of additional health care facilities, less the benefits of added labor productivity.

CONCLUSIONS

This study utilizes insights from the new institutional economics to understand the endogenous demand the Orma are suddenly experiencing for institutional change. A number of factors in their environment have created

pressure for new contractual arrangements and new property rights, which in turn have necessitated that the Orma draw upon the institutional resources of the national government to provide third party monitoring and enforcement. According to the theory, if such institutional change does indeed lead to decreased transaction costs for the Orma and more efficient allocation of economic resources, the stage could be set for a period of economic growth, even in the absence of technological change. As such processes are undoubtedly underway in many other societies all over the developing world, this study should have important general implications for economic development.

What makes this an unusual case study is the existence of a large quantitative database for the period just before the most recent institutional changes. Together with the restudy, these data will afford the rare opportunity not only to document the extent of changes in production, consumption, and social structure, but to actually measure their impact upon the quality of life of the population. As there appears to be widespread ideological support for the institutional changes, it is proposed that they have benefitted a large sector of the population. The analysis will provide specific data on the extent to which this holds for all sub-sectors of the population and all measures of the quality of life. The data will also indicate the strength of specific relationships between important economic, nutritional and health variables, thus allowing government policy planners to more effectively allocate scarce resources to social services.

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