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on Rural Economic
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Institutional Effects on Rural Economic and Demographic Change

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Abstract

Much of conventional wisdom on the relationship between population and rural development is flawed because it ignores or understates the importance of institutional contingency. The paper seeks to develop and defend this assertion. First, the outlines of the rural demographic situation in the Third World and covariant trends in agricultural resources and technology are briefly described. Next, a rationale is developed for explicit treatment of institutional contingency at various levels of economic and social organization. Of chief interest here, in addition to property and labor relations, are family patterns, community organization, and government administration. Both topical and country illustrations of the relationships between rural development and population change are presented. The final section discusses the policy implications of the analysis, which are summarized by the dictum: "getting institutions right."

Rural development is the process of sustained growth of the rural economy and improvement of well-being of the rural population. In conventional wisdom population growth is variously implicated in this process. It is assigned a progressive role in inducing technological advance and allowing scale economies in infrastructure, a retrogressive one in hindering capital-deepening and harming the environment. In turn, rural economic growth supposedly promotes the decline of mortality and fertility along the familiar path of demographic transition, and is accorded some part in generating the massive rural-urban migration of labor that has created the megacities of the Third World.

The working premise of the present paper is that much of this conventional wisdom is inadequate: not necessarily wrong, but seriously underdetermined. What is too often missing or seriously incomplete in studies of how rural development--or its absence, rural stagnation or impoverishment--is interrelated with demographic change is an appreciation of institutional contingency. Population-rural development relationships are modulated by society-specific patterns of social organization and by the rules and routines of economic and political behavior--in short, by the society's institutional structure. Ignoring this structure is to assume that institutional patterns are uniform and constant across societies or change in determinate, predictable ways in the course of development--or (a position once associated with neoclassical economists) are no more than a veil, obscuring and to a degree interfering with the operations of free markets. These assumptions are unwarranted: they lead to constricted analysis and sometimes dubious policy advice.

Admitting institutional effects in production relations--property rights, factor and product markets, landlord-tenant relationships--is a considerable advance, but by no means fully covers the territory. Yet this is where the frontier of research in rural development now lies. In effect, an "economic" domain of rural life is partitioned off, implicitly assumed to contain all that is needed to understand agrarian outcomes. Certainly there are major insights to be got here, but not without

careful attention to *ceteris paribus* conditions. And the examination of those conditions leads us to other institutional domains, not perhaps intrinsically less accessible to economists but less frequented by them. How adequately to take institutional dimensions into account in analyzing rural development-population interrelations, and the implications of doing so, are the subjects we are concerned with.

Not all parts of the field of rural development have significant ties to demographic processes and thus may be omitted from consideration in this task. For example, changing factor use and technological innovation in agriculture are clearly pertinent to the subject, since both may be influenced by demographic pressure; most of the details of agricultural practices and farm economy, however, are not. This is not to say that diligent scholarship could not trace out lines of influence from demographic factors to, say, the intricacies of cropping patterns, or from soil fertility to human fertility--it can, and does. But this very readiness to pursue the finest threads of connection has produced a picture in which the main lines are obscured by trivial (though perhaps interesting) issues. Research is thus sidetracked or governed more by methodological interests and "data sets" than by an informed sense of substantive priorities. Policy conclusions turn out to call for measures that would in any event be wholly defensible as contributing to higher productivity and improved levels of welfare, with adjustments in detail and weight in order to garner some additional demographic benefits.

The more important linkages between population processes and rural development lie in the institutional arrangements that govern each. Consider the case of rapid population growth. The modern era of population growth, exogenously generated, in which doubling times have been reduced from the order of 50-100 years to, at its peak, 20-30 years, places unprecedented stresses on family systems and on the rules and conventions in the broader society that regulate social relations, access to the economy, and environmental stability. Traditional patterns of social and economic behavior

that evolved in the former demographic regime are manifestly incompatible with the new conditions. Yet the adaptations that emerge, for reasons that are usually not hard to fathom, often do not represent a shift toward sustainability--through faster economic or slower demographic growth.

An analogous argument applies to economic change from sources exogenous to the rural sector, whether modern agricultural technologies and inputs or the administrative technologies of government planning and programming. While increased agricultural productivity is clearly a happier condition to deal with than faster population growth, the degree to which the rural sector translates this to routinized welfare improvement and socially appropriate demographic behavior depends on the rural institutional arrangements that dictate the perceived incentives facing individuals.

In brief, the simple analysis of economic-demographic relationships in an institution-free world, drawing on a technical production function on one hand and an equally technical "fertility function" (the outcome of regressing the birth rate on income, education, occupation, and similar variables) on the other, produces a picture of economic development and demographic transition that omits nearly all its problematic content. The policies it leads to are similarly straightforward and conflict-free: those that speed economic growth have favorable effects on mortality and fertility; those that promote demographic transition have incidental advantages for per capita material welfare. The subject of population and rural development, thus construed, has little in it beyond its two separate components.

No serious student of economic development sees the development problem wholly in terms of technical relationships. Even in those sub-areas where such relationships might have seemed most appropriate, institutional dimensions increasingly are recognized as crucial to a full understanding. Two significant examples are the study of famine and of environmental degradation. The conventional view of famine is a straightforward deficiency in food

supply or distribution, reflecting some combination of crop failure, hoarding, and inadequate storage and transport facilities, and, in the longer run, population growth "outpacing" the rate of increase in agricultural productivity. A large literature on population and food, ranging from Club of Rome-style global modeling to detailed studies of population carrying capacity, concentrates on these physical magnitudes and technological (and biological) relationships. Contrast this approach, however, with the analysis of famine by A.K. Sen (1981). Sen has shown, through a careful analysis of modern instances, that aggregate measures of per capita food availability are singularly poor predictors of famine. Major famines--Bengal in 1943, Bangladesh in 1974, Ethiopia in 1973--have occurred, if not amid plenty, at least in the absence of unusual food shortages. The cause of those famines is to be found not in a simple decline in aggregate food availability but in a failure of what Sen calls trade entitlements. Sen's approach focuses on the diverse ways in which particular segments of the population establish entitlement to food and the equally diverse ways in which entitlements may collapse. The crises in both 1943 Bengal and 1974 Bangladesh can be attributed primarily to the entitlement failure of rural wage laborers, through a combination of depressed labor demand and food-grain price inflation. In 1973 Ethiopia, the famine fell most heavily on pastoralists, whose trade entitlement collapsed with the death of their livestock. Understanding the structure of food entitlements in a particular rural society calls for study of the nature and distribution of property rights, the structure of labor and product markets, and analogous elements of its socioeconomic institutions.

A similar shift from the technical/material to the institutional is seen in the analysis of environmental degradation. The unreflecting assumption that excessive population growth leads to ecological deterioration through processes such as deforestation, erosion, siltation, salination, and so on, has given way to careful examination of the breakdown of the societal arrangements that may formerly have acted (and elsewhere continue to act) to maintain

land resources, or to finding reasons for the failure of such arrangements to emerge in the face of more intensive resource use. The central analytical task becomes that of delineating and explaining the effects of demographic change on rural institutions.

While such instances of shifts in perspective and expanded problem definition can be pointed to, the institutional dimensions of interactions between population change and rural development receive much less attention than they warrant. Redressing this situation, we believe, is the most promising way forward for both research and policy thinking in the area. That endeavor will not lessen controversy--choice of the weights accorded particular institutional domains in the analysis is fertile ground for dissension--but the arguments will have become more germane to real development issues.

This paper aims to develop and illustrate these arguments and to contrast the resulting analytical approach with some of the prevailing assumptions and methods. As background, we begin by sketching the outlines of the rural demographic situation in the Third World and covariant trends in agricultural resources and technology. The paper then lays out the rationale for explicit treatment of institutional contingency at various levels of economic and social organization. The institutional configurations of chief interest here, in addition to property and labor relations, are family patterns, community organization, and government administration. We draw on both topical and country illustrations of rural development-population change relationships. Following from that discussion, the final section deals with the policy issues thereby raised--variants, for the most part, of the dictum "getting institutions right."

RURAL FUTURES: VISIONS AND CONSTRAINTS

The Demographic Setting

The rural population of the Third World has grown from 1.4 billion in 1950 to an estimated 2.7 billion in 1990, almost a

doubling. The 1988 UN medium-variant projections show a continuing but much slower increase in the future: to 3.0 billion in 2000 and a peak of 3.15 in 2015, as the twin forces of fertility decline and outmigration take greater effect. The absolute average yearly increases in Third World rural population over successive 5-year periods (estimated and projected, in millions) are put as follows:

1950-55	23	1990-95	35
1955-60	21	1995-00	28
1960-65	32	2000-05	19
1965-70	40	2005-10	8
1970-75	39	2010-15	1
1975-80	35	2015-20	-6
1980-85	36	2020-25	-12
1985-90	36		

By contrast, the yearly increments in the Third World urban population increase throughout this period: 14 million per year in 1950-55 and a projected 45 million per year in 1985-90 and 90 million per year in 2020-25. (United Nations, 1989a.)

Tables 1-4 present simple regional analyses of these figures. As a first-level breakdown by broad region the present (1985-90) rural population of the Third World is divided into East Asia and South Asia, each with some 900 million people and together making up two-thirds of the total; Southeast Asia and sub-Saharan Africa, each with some 300 million; and Latin America and Middle East/North Africa, each with some 100 million. (The present rural population of the more developed countries, in the UN estimates, comes to 330 million.) The principal information conveyed by these tables can be summarized as follows:

- The major predicted change in relative size of regions will result from the continued surging growth of sub-Saharan Africa, which takes the rural population of that region to equality with India's by the end of this projection period. Even if, as a result of the AIDS epidemic, resurgent malaria, or other causes, the UN's mortality assumptions for the region have to be adjusted upward (they currently show a nearly 30 percent reduction in the death

Table 1: Estimated and Projected Rural Population of Major Less Developed Regions, 1950-2025 (millions)

Region	1950	1975	1990	2000	2025
Latin America	97	125	124	123	116
East Asia	517	767	913	982	855
Southeast Asia	155	252	313	338	320
South Asia	402	668	869	995	1031
Middle East and North Africa	63	90	115	128	131
Sub-Saharan Africa	161	265	364	446	604
All less developed regions ^b	1398	2169	2702	3017	3064

^aAfrica excluding Egypt, Libya, Tunisia, Algeria, Morocco
^bTotal also includes developing countries in Oceania (rural population 5 million in 1990)
 Source: Data from United Nations (1989a: Table A-5)

Table 2: Distribution of Rural Population of Major Less Developed Regions, 1950, 1990, and 2025 (percent)

Region	1950	1990	2025
Latin America	7	5	4
East Asia	37	34	28
Southeast Asia	11	12	10
South Asia	29	32	34
Middle East and North Africa	5	4	4
Sub-Saharan Africa	12	13	20
Total ^a	100	100	100

^aIncludes developing countries in Oceania
 Source: Table 1

Table 3: Absolute and Average Rates of Rural Population Growth in Major Less Developed Regions, 1950-75 and 1975-2000

Region	Absolute increase in population (millions)		Average rate of growth (percent per year)	
	1950-75	1975-2000	1950-75	1975-2000
Latin America	28	-2	1.0	-0.1
East Asia	250	215	1.6	1.0
Southeast Asia	97	86	1.9	1.2
South Asia	266	327	2.0	1.6
Middle East and North Africa	27	38	1.4	1.4
Sub-Saharan Africa	104	181	2.0	2.1
All less developed regions	771	848	1.8	1.3

^a Includes developing countries in Oceania
Source: Table 1

Table 4: Rural Population as Percentage of Total Population in Major Regions, Estimates and Projections 1950-2025

Region	1950	1975	1990	2000	2025
Latin America	58	39	28	23	15
East Asia	88	78	75	72	51
Southeast Asia	85	78	71	64	46
South Asia	84	79	72	66	47
Middle East and North Africa	74	55	46	40	26
Sub-Saharan Africa	89	79	69	62	44
Europe	44	31	27	24	18
North America	36	26	25	25	22
Japan	50	24	23	22	20
USSR	61	40	32	29	26
World	71	62	57	53	40

Source: United Nations (1989a: Tables A-5, A-7)

rate over 1985-2000 and life expectancy reaching 65 years by 2025), rural population growth there is likely still to be the highest.

- Aside from sub-Saharan Africa, peak rates of rural population growth are now well in the past. On the other hand, no "emptying out" of the countryside is foreseen. Absolute declines in rural population are predicted to have begun in all regions except sub-Saharan Africa by late in the period, but the numbers of people in rural areas in 2025 would be barely below today's levels--and, in South Asia and Middle East/North Africa, substantially greater.

- The present share of total population living in rural areas is about 70 percent in each major Third World region except Latin America and Middle East/North Africa. At projected growth and migration rates, this fraction will fall to about one-half by 2025. (It is striking that sub-Saharan Africa shows this pattern despite the rapid rural population growth of this region.) Latin America's time-path in proportion rural shows an exceptionally rapid drop over 1950-75 and thereafter conforms with the more developed regions of the world. Middle East/North Africa presents an intermediate case. For the Third World as a whole, the estimated and projected time trend in percentage rural is as follows:

1950	83
1975	73
1985	69
2000	60
2025	43

No similarly straightforward data can be assembled for rural product or other indexes of sector-wide economic performance. Agriculture, as the dominant rural industry and occupation, is usually made to serve as proxy. Both cross-sectionally among countries and over time for individual countries, the share of agriculture in GDP and the share of the labor force in agriculture bear fairly predictable relationships to overall economic development measured by per capita GDP. For groups of countries assembled

into World Bank categories, we have the following averages for share of agriculture (data for the mid-1980s--World Bank, 1988):

	Percent share of agriculture in	
	<u>GDP</u>	<u>Labor Force</u>
Low-income countries	32	72
Middle-income countries	15	43
Industrial market economies	3	7

In many of today's low-income countries it is hard to imagine a future in which agriculture would have fallen to 3 percent of GDP and 7 percent of the labor force. This may be simply a reflection of the scale of their present difficulties: well-informed observers around 1950 were just as skeptical of Japan's industrialization prospects. But it is equally possible that some of these countries will remain predominantly agrarian in employment and substantially agrarian in product into the indefinite future.

What are the uncertainties in the demographic futures sketched in the above tables? Demographers claim to make population projections rather than forecasts, a claim belied by their eagerness to take credit when they turn out to be correct. The UN's medium-variant projection is the UN's best (surprise-free) guess of what the future holds: for the Third World as a whole, the medium-variant projection for 2025 shows a total population of 7.11 billion, of which 43 percent (3.06 billion) is rural. The high and low variants for total populations are 7.97 and 6.33 billion. (United Nations, 1989b.) If the same urban fraction were applicable in each case (not strictly a defensible assumption, but good enough) then the high- and low-variant projected rural populations in 2025 would be 3.43 and 2.72 billion, a range of 700 million.

Beyond 2025, the already considerable uncertainties reflected in this high-low range mount rapidly. The World Bank, which, less cautious than the UN Population Division, issues country-level projections to 2100, downplays these uncertainties by focusing on

a single set of assumptions for each. For Third World mortality, it is assumed that the recent pace of decline will continue more or less steadily until life expectancy reaches the levels of the present-day industrial countries by late next century--a proposition until recently taken for granted but now, with the emergence of new pathogens and drug-resistant strains of some major old ones, seemingly much less well-founded. For fertility, Paul Demeny (1984:115-116) has characterized the assumption as follows:

In countries where current fertility is low, the index of total fertility is expected to settle permanently at replacement level by the turn of the century....A partial exception is China: there, reflecting current official policy objectives, the projections assume that fertility will remain substantially below replacement level during a 15-year period beginning with 1985. In other formerly high fertility countries--such as Brazil, India, and Indonesia--the projections envisage that the recent rapid decline of fertility will continue unabated, resulting in replacement level total fertility rates around 2015, a level firmly to be maintained thereafter. Countries where fertility is still very high are expected to embark on a course of precipitous fertility decline beginning with 1990 (as in Pakistan and Bangladesh) or with 1995 (as in Nigeria). These countries are assumed to reach replacement levels of fertility in the 2030s.

Commenting on the basis for these assumptions, Demeny remarks (1984:120) that:

the logic of the proposition that fertility trends in all countries will have converged to replacement level well within the first half of the twenty-first century is hardly compelling. What mechanism within a short few decades will induce, at least in terms of average reproductive performance, the same fertility behavior in tropical Africa and in Western Europe? Implicit in the projections for countries with still high fertility is either a more sanguine view than is warranted by history about the efficacy of future socioeconomic development in inducing rapid fertility decline, or the assumption that policy interventions aimed at rapidly reducing fertility will become far more pervasive and effective than has been the case thus far.

In one important respect, the picture of slackening population growth implied for the next several decades in the projections in Table 1 is misleading. The major fertility declines that give rise to this picture do not start to influence the labor force for 15 or 20 years. Hence the labor force growth rate is lagged behind the population growth rate. For those Third World countries where urban fractions are still low and where significant fertility declines began only in the 1970s, rural labor absorption problems traceable to population growth will diminish substantially only after the turn of the century.

The projected rural population size is also sensitive to assumptions about rural-urban migration. The UN projections are based on continuation of observed differentials between urban and rural growth rates and the slow convergence of this differential to a "world norm" level by the end of the projection period. Clearly, no such smooth processes of urbanization and obedience to international cross-sectional experience need apply in any particular country. Many observers detect signs of new patterns of urban development emerging in which there are large roles for secondary cities and rural industry, and burgeoning "circular migration" and rural commuting to industrial jobs. Expectations of vast urban agglomerations, typified by the widely publicized 1980 UN projection of Mexico City reaching 31 million by 2000 (United Nations, 1980; more recent projections have lowered this figure by 5 million or so), are called into question by the immense difficulties of maintaining minimally effective infrastructure and public services even at present sizes. New industrial technologies, moreover, may modify the scale and locational economies that currently favor urban concentration.

Land Resources and Agricultural Technologies

The FAO project on "Land Resources for Populations of the Future" (Higgins et al., 1982) is the main data source for the worldwide status of existing and potential agricultural land. (A

few countries are excluded, most notably China.) The importance of the study lies in its combining estimates of opportunities for agricultural expansion at both the extensive and intensive margins, and its relating of these to hypothesized levels of technology with subnational agro-ecological zones classified by soil and climate. The World Bank (1982:59) cites estimates for the developing countries of unused but potentially cultivable land from 0.5 to 1.4 billion hectares (over and above the existing 0.8 billion hectares under cultivation), most of which is currently forested land in tropical Africa and Latin America. The total cultivable area assumed in the FAO study is well to the optimistic end of this range.

Constraints on land expansion include the high capital costs of clearing and the continuing cost of preservation of often fragile ecological balances (or the cost in foregone output of land degradation); the distances of much of the new land from existing markets, given the transport inadequacies that typically exist; and, in broad swathes of Africa, endemic diseases to be overcome. A new set of constraints, backed by an increasing mobilization of public opinion, derives from concerns about effects of deforestation on climate, on the well-being of indigenous peoples, and on species extinctions. Paradoxically, the value of unexploited land endowments in a poor country may be slight. Only with economic development are the financial resources and infrastructure likely to be found to turn potential into productive assets.

High agricultural inputs as defined in the FAO carrying capacity study consist of "complete mechanization, full use of optimum genetic material, necessary farm chemicals and soil conservation measures, and cultivation of only the most calorie (protein) productive crops" (Higgins et al., 1982:viii). Resulting yields in grain equivalent are put at around 5 metric tons per hectare, in comparison to the present Third World average of 1.5 tons.

A wide range of views exists on how plausible such high-technology futures are. A glowing report on Third World agricul-

tural possibilities, framed in terms of resulting problems for food-exporting countries like the United States, is that of Dennis Avery (1985). He writes (p.408):

The wheat and rice varieties of the Green Revolution are legend; genetics has gone on to produce the world's first hybrid wheat, cotton, rice, and rapeseed. Triticale, a hybrid of wheat and rye, outyields other cereals by 250% under certain unfavorable conditions. There are new sorghums for Africa that may have Green Revolution potential...

and much more in this vein. The existing network of international agricultural research stations and increasingly competent national research establishments would be important contributors to that course of technological advance, complementing public expenditure on rural infrastructure and agricultural extension services. The relatively subdued tones of the 1982 World Development Report (focused on the agricultural sector) stand in some contrast. The Report points out, for example, that little research has been done on pulses, rootcrops, and tubers, although, in sub-Saharan Africa, these make up more than a quarter of agricultural output (World Bank, 1982:68). Additional cause for worry comes from the risk of large-scale ecological instabilities generated by human activity: feedbacks as yet poorly understood that may prove difficult or virtually impossible to counter. Chief among these, albeit with a high associated level of uncertainty, is the greenhouse effect of changing atmospheric composition on ambient temperatures, rainfall patterns, and sea level. At a smaller scale, adverse environmental consequences stemming from heavy application of fertilizer, pesticide, and weedicide also mount up. Looking just at the technical issues, sustaining production increases of 2-3 percent annually--keeping up with or slightly exceeding population growth--may seem relatively straightforward based on recent experience with crop improvement and modern inputs. There are doubts enough, however, at least to seriously qualify that expectation.

Whatever the technological possibilities, the practical problems of achieving such rates of output growth under the institutional and political conditions of many contemporary Third World countries are formidable. How far actual performance lags behind the technically feasible depends in part on the wisdom and effectiveness of government agricultural policies, particularly pricing policies. In the past these have frequently been highly misguided--for a familiar array of reasons. The now routine attention accorded to understanding the price incentives and disincentives facing farmers and the relating of tales of policy competence and incompetence--stock-in-trade in the advice-giving of international development agencies--give hope for policy improvement in the future. Redressing past errors on this score can produce quick gains in productivity through a move toward the technological frontier. The more intractable problems, in that governments have limited skill and purchase in dealing with them, are in getting institutions right.

Rural Social and Economic Organization

Construction of scenarios of the global future a generation or more hence has been a popular activity at least since the 1960s. Well-known landmarks are Herman Kahn and Anthony J. Wiener's The Year 2000 (1967), the first Club of Rome report (The Limits to Growth--Meadows et al., 1972), and the US government-sponsored Global 2000 Report (1980). Analogous efforts for particular countries or regions are similarly quite common. The series of "Second India" studies prepared in the 1970s--exploring how India should respond to the challenge of the forecast doubling of its population from 1971 to about 2010--is one example (Ezekiel, 1978). The 1979 Monrovia Symposium on the Future Development Prospects of Africa towards the Year 2000, organized by the OAU, is another (Organization of African Unity, 1979).

Perhaps because successful development is typically associated with emergence of an urban-industrial economy, such scenarios seldom have much to say about rural social systems. We get from

them no clear picture of the rural socioeconomic or cultural conditions that go with the envisioned futures. Their interest in rural matters, such as it is, centers on food production and its technology and factor inputs. Little else counts.

For a particular developing country, let us assume that, by whatever means and with whatever mode of organization, the agricultural sector approaches the productivity levels found in the rich countries today. Accompanying such an advance, even with efforts to limit any labor-saving bias in technological change and to tolerate (and finance) surplus production, would be a fall in agricultural employment to "modern" levels, say 15 percent or less of the labor force. (In Japan now it is 12 percent; in the US, 2 percent.) What happens to the rest of the rural work force? Essentially, there are three things people can do: find work in rural-based industries (including jobs in agricultural processing and marketing), commute to urban jobs, or move to the city. Societies differ in the combination of options selected. Moreover, depending partly on its scale and on details of relevant tax policies, farming may be either a specialized activity, as it largely is in the US and most of Europe, or part-time, as in much of Japan. Of course, present-day Third World farming is also largely part-time, in the sense that a sufficiently detailed enquiry on the time-use of an average farm family would elicit the virtual gamut of occupations. Specialization, if it comes, sets in later.

As shown by the histories of the developed countries, and as forecast in Table 1 for the Third World, even substantial rates of rural-urban migration (and increasing fractions of population urban) are not generally accompanied by significant depopulation of the countryside. In the US, for example, the rural population has been roughly constant in absolute size (in the range of 50-60 million) since around 1920, a time at which the urban fraction was one-half. It is the farm population that has fallen drastically.

High-productivity agriculture sustains a substantial rural support structure to supply inputs and marketing services to the

farm sector. Transport developments allow many rural residents access to urban labor markets. Rural-urban boundaries at the fringes of suburban settlement and at the lower bound of town size become fairly arbitrary, with rural society little disadvantaged in access to consumption goods, communications media, and public services, and converging also to urban patterns in health and fertility. Dualistic aspects of the national economy (modern versus "traditional" contrasts in technology and labor productivity), if they still linger, are less and less coincident with either rural-urban or agriculture-nonagriculture sectoral divisions.

While the number of countries that will achieve this sort of rural prosperity over the next several decades can only be guessed, it is fairly safe to say that the majority of the 3 billion or so people who will make up the rural Third World will encounter less favorable outcomes. In their details, country experiences will of course be culture-specific, dependent on particular inheritances of family system, ethnic divisions, political culture, and other such elements that in any society display notable staying power in the face of economic change. Diverse geographical and ecological circumstances similarly leave persisting imprints that hinder generalization. In broad economic terms, however, there may be greater commonality. In deploring simplistic doom-laden scenarios of the consequences of population growth in India, Robert Cassen (1978:331) writes:

The gradualness [of population growth] leaves room for innumerable processes of adjustment, and so does the spatial dimension. All these extra millions arrive not in huge crowds springing up overnight in city centres, but in small numbers each year in half a million villages and on the edges of towns and suburbs. To a very considerable extent one can answer the question, what does the future hold for India, with the observation that the future has already arrived.

Modest progress, with distinct economic successes appreciably but not wholly offset by losses elsewhere, and attained at ecological and esthetic costs largely uncounted in conventional income measures, is a plausible picture not just of the next few decades in rural India, but of rural trends in a broad middle range of countries in the rest of South Asia, perhaps China, the Middle East, poorer Latin America, and richer Africa.

For completeness, we should also consider rural futures in which productivity levels are either uniformly low or low for most of the labor force. Lengthy periods of stagnation resulting from bad policies or dramatic reversals of performance tied to political turmoil and civil disorder can equally achieve this outcome. That there will be "failed" economies 50 or 100 years hence is likely enough. How they might differ from those that might be so identified today, given a vastly changed international context (with far more relatively rich countries, the easy spread of a range of modern technologies and of information on differential economic circumstances, and another global population doubling), is impossible to predict.

THE "STANDARD" INSTITUTIONAL CONTENT OF RURAL DEVELOPMENT STUDIES

Studies of the interrelations between rural development and population change usually emphasize agricultural production technology and various aspects of labor market structure and land tenure, with population characterized simply by size, density, or vital rates. Population growth is a source of pressure for technological advance and sometimes for adaptations in tenure systems or employment contracts, and in turn demographic processes may themselves respond to improved economic conditions by progressing along a smooth path of transition from high to low mortality and fertility. Different agrarian systems have different implications for the pace of productivity change, for labor absorption, and for income distribution, hence allowing a ranking of outcomes according to these criteria and suggesting directions for policy intervention that might favor a preferred outcome.

Institutional analysis in population and rural development thus tends to be identified with investigation of land tenure systems and labor relations, their response to demographic change, and their putative demographic effects. This work draws on a growing body of economic theorizing that seeks to explain agrarian institutional structures in terms of assumptions about individual interests and behavior. Pranab Bardhan (1989a) identifies three strands of theory on agrarian economic institutions. One derives from Marx's analysis of property relations; a second from recognition of significant transaction costs in much of economic exchange; and a third from the analysis of information asymmetries and incomplete markets.

Marxian analysis of class interests and their institutional manifestations can contribute much to explanation of agrarian system change (or stasis), though practitioners may tend to see all nonmarket social relations as aspects of class relations, characterized by "unequal exchange"--exploitation or coercion. Thus, in rural economic-demographic change, class-based institutions are the salient mediating structures in the relationship. In consequence, possible roles for complementary mediating institutions that are not class-based are not seriously considered. Robert Brenner on agrarian development in preindustrial Europe is a notable case in point, propounding the thesis that "it is the structure of class relations, of class power, which will determine the manner and degree to which particular demographic and commercial changes will affect long-term trends in the distribution of income and economic growth" (Brenner, 1985:11; for critiques see Aston and Philpin, 1985).

Bardhan's second strand of institutionalist theory is neoclassical institutional economics. Here the premise is that institutions evolve to minimize transaction costs (that is, the costs of entering into and enforcing contracts among economic agents). Changes in technology, changes in scale, and development of markets (for example) alter those costs, eventually to the extent that the benefits promised by a different institutional configuration

outweigh the costs of change--whether by negotiation or force. The main field of application of these ideas has been agrarian systems. As a few among many examples in a now substantial literature, Douglass C. North and Robert Paul Thomas (1971, 1973) interpreted the transition from feudalism to landlordism in Europe in those terms; with more modest ambition, S.N.S. Cheung (1969) uncovered the rationale supporting various forms of sharecropping, once seen as generating economic inefficiency through a perverse incentive structure; and Yujiro Hayami and Masao Kikuchi (1982) applied transaction cost arguments to account for shifting forms of labor contract in Southeast Asian agriculture. Population growth has an appreciable role in this approach--by altering factor proportions, increasing market size, inducing technological progress, and so on--working through effects on transaction costs to set up conditions for institutional change.

The third theoretical strand of institutional analysis comes from exploring the implications of incomplete information on markets and economic behavior. In this view, institutions emerge "to substitute for missing credit, insurance, and futures markets" (Bardhan, 1989a:7). In the context of rural development, the elaboration of this theoretical approach--highly amenable to formal treatment, as the studies assembled in Bardhan (1989b) attest--is termed by Joseph Stiglitz (1986) the "new development economics." The contrast with the transaction cost approach is more one of perspective than of any substantial difference in understanding the nature of institutions: imperfect and costly information and asymmetry in its availability are sources of high transaction costs. By transposing the basis of the problem to the realm of information, however, the analysis is less grounded in the tangible processes of development--a weakness for our purpose since demographic change is very much a part of those processes.

Demographic influences on agrarian economic performance working through property and labor institutions are fairly well accepted. The demographic effects of such production arrangements, however, are less demonstrable. A defensible view is that tenure

systems (to take one instance) are, in and of themselves, of comparatively minor significance for population-rural development interrelations except insofar as different tenurial arrangements affect the course of rural development and the pace of income growth (see Cain and McNicoll, 1988). Whatever the merits of land reform as an instrument or precondition of rural development, the evidence suggests that no clear fertility effect follows from, say, a shift in tenurial status from tenant to owner. (As will be noted below, the security of both civil and property rights is an issue of some demographic significance; however, this is more the province of the legal and administrative systems.) Effects on outmigration are more plausible, although here there are alternatives of accommodation of population increase within the rural economy through "static expansion" or through some form of institutional adaptation--choice among which has as much to do with family patterns as with land tenure institutions.

Any adequate treatment of population and rural development, especially one that aspires to account for intersocietal differences in outcomes, must of course pay due attention to agrarian economic institutions. However, agrarian outcomes are conditioned also by other institutional factors--indeed we would maintain that characteristics of family and supra-family social structures may contribute as much to the operation and achievement of the rural economy as do more narrowly "economic" institutions, and perhaps more to the course of demographic change. Yet such factors are rarely brought into consideration. In effect, certain parts of the setting in which economic-demographic change is being investigated are, for unexamined reasons, taken to be structurally elastic and other parts inelastic, not by evidence but by assumption or, possibly as often, by inadvertence. Sometimes this may not matter, sometimes it may.

AN EXPANDED INSTITUTIONAL CONFIGURATION

Often-neglected institutional domains that arguably play major roles in agrarian economic and demographic outcomes are: family and

gender systems, village and community structures, government administrative arrangements and legal systems, and the external institutional context. We give a brief gloss on each of these "clusters" and set out the rationale for a greater relative weighting of their significance.

Family Systems

Family systems differ in how they deal with intergenerational property transfer, their control over the establishment of new households, the role differences between men and women they perpetuate, and their marital fertility responsiveness to the changing economics of children. Gender systems, patterns of organization of sex roles, and the "mode of reproduction" can for our purposes be subsumed within family systems. Family systems also are notably resilient in the face of economic, demographic, and cultural change in societies. The essential forms persist relatively intact over many generations. Any comparative discussion of population and rural development issues across societies characterized by different family systems that does not take account of the implications of those systems is *prima facie* suspect.

Rules of property transfer and household formation have important potential implication for the integrity of agricultural holdings over time. In Northwest Europe, rules of household formation and inheritance were such as to prevent land fragmentation or the proliferation of households. Systems of primogeniture were in effect over much of this area, but even where partible inheritance was the norm, the division of land was avoided. Furthermore, in the Northwest European family system the timing of marriage and thus the formation of new households were closely tied to economic conditions. This responsiveness created a rough homeostasis, such that periods of economic contraction induced later and fewer marriages, and as a result lower fertility and more moderate rates of population growth. Economic prosperity had the opposite effect. The Japanese family system was similarly

"successful," exerting strong controls to prevent land fragmentation and the proliferation of households. A demographic-economic equilibrating mechanism comparable to Europe's can be inferred for rural Japan.

Family systems in most contemporary developing countries exhibit neither of these characteristics. Many of these societies are governed by "joint" household formation systems (as defined by Hajnal, 1982) and by norms of partible inheritance, which, in recent decades, have contributed to the rapid fragmentation of agricultural holdings. In contrast to the historical systems of Europe and Japan, the joint family system is relatively inflexible with respect to the timing of marriages (the system encourages marriage at a young age for males and at an even younger age for females) and the formation of new households; it is relatively unresponsive to changing economic conditions. How the European and Japanese systems would have coped with an exogenously induced mortality decline of proportions similar to that experienced by Third World countries since the 1940s is a matter of speculation. However, given the premium that these systems placed on the preservation of agricultural holdings and the subservience of marriage and inheritance practice to this goal, it seems likely that a better accommodation would have been witnessed than is evident in the joint-family societies of the present day.

This likelihood appears stronger when one considers a third important difference between Northwest European and joint family systems: in the former, there seems to have been little connection between the number of surviving children and the welfare of parents in old age, while in the latter the connection is strong. In Northwest Europe the welfare of the indigent elderly was the province of public institutions rather than the family, even in preindustrial times. (Those with property typically negotiated formal retirement contracts.) In contrast, in joint family societies old-age support is very much a family concern, with sons most often bearing the responsibility for the care of the elderly parent. In the event of substantial mortality decline, the

economic calculus underlying any fertility response would be quite different in the two regimes: in the European case, substantial security benefits of children would not be a factor in the fertility response of parents, while in joint family societies they would be an important consideration.

Sub-Saharan African family systems stand apart from the joint family systems of the rest of the developing world. One way of characterizing this distinctiveness is by reference to the boundary of the corporate group: in joint family systems the boundary, for important practical purposes, encompasses the nuclear or the vertically extended family, while in sub-Saharan Africa the boundary tends to encompass a larger kin or lineage group. In the joint family system the conjugal bond is strong; in African family systems this bond is weak relative to ties with one's natal family and lineage group. In Africa the latter group is the locus of control over the demographic and economic behavior of individual members to a much greater extent than, for example, in Asia. (This reflects other important institutional and economic realities in sub-Saharan Africa, including systems of communal property rights and the traditional importance of livestock as a form of wealth.) With respect to rural development and demographic transition, African family systems appear to be the least facilitative of the three general types. The persistence of corporate lineage groups permits the diffusion of reproductive costs and sustains the separation of fertility interests of husband and wife, impeding fertility decline. Lineage interests also constitute a source of resistance to the introduction of individual private property rights, which many would argue was a necessary condition for agricultural development.

Community Organization

Community forms, often tied to settlement patterns and kinship affiliations, are, like family systems, long-lasting. Institutions rooted in local community structures have a potentially significant bearing on rural economic and demographic outcomes. In some cases

such institutions in effect make up an agrarian system--as in corporate villages, for example--but more often the two are conceptually separate and impose distinct kinds of constraints on the direction of change. Where there is a sizable nonagricultural rural economy overlapping (in location and labor force) the agricultural economy, the role of community-based institutions in both demographic change and rural development may be larger than that of specifically agrarian institutions.

The stereotype of traditional rural society posits solidary hamlets or natural villages as the next important social unit after the family. While the "village republic" is no longer taken seriously as a depiction of historical reality, in most rural societies local supra-family groupings did exert considerable influence over their members' behavior in certain domains of life, including matters bearing on the family economy and fertility. That influence has weakened and its domains have narrowed, but in many societies an appreciable residue remains today.

The important distinguishing characteristics of local organizational systems for the present discussion are their degree of corporateness and territoriality (see Cain and McNicoll, 1988). Corporateness governs the capacity of the group, or of an elite within it, to influence the behavior of members to suit group interests, however these may be defined. Territoriality affects the likelihood that demographic behavior will be included in the kinds of behavior subjected to group pressure. Territoriality also facilitates orderly governance: land stays where it is.

Kinship is the chief competitor to territory in defining community systems in traditional rural societies. Natural villages may have kin ties linking many of their members, but their principal identification is as a territorial unit with more or less fixed boundaries. There are instances, however, where kinship takes precedence over territory, where clans or other kinds of corporate kin groups dominate the local-level social landscape. Also common are cases where there are several distinct bases of

affiliation, no one of them dominant, each generating a system of local groupings with a particular range of interests.

Preindustrial Japan and Switzerland can be taken as illustrations of strong corporate-territorial community systems. Villages in both could and did exact a high degree of conformity from members and could presumably cope readily with free-rider problems. Modern examples, different from one another in many respects but not in these, are villages in China and South Korea--mobilized in support of government policies and programs but still far from being mere instruments of government authority. These cases contrast strikingly with, say, villages in contemporary Nepal, which appear to be nearly helpless to enforce sound agricultural and forestry practices under rapid population growth, or in Bangladesh, where the prominent local-level organizational roles are played by kin groups and factions rather than territorial communities. In sub-Saharan Africa, similarly, village organization has traditionally been quite weak in comparison to tribe and lineage--there reflecting the history of pastoral rather than agricultural economies and longstanding migratory patterns.

The clear presumptive conclusion is that corporateness and territoriality are community characteristics that facilitate demographic restraint and may do so even under an "adverse" family system. They appear to be valuable in safeguarding environmental stability. Whether they also help to promote vigorous economic performance is more doubtful: indeed, a strong case can be made that they as often as not impede it.

Local Government Administration

The lower rungs of the government's apparatus of civil administration (together with the parallel local apparatus existing in some polities that is associated with military control or dominant political party organization) are also relevant to rural economic and demographic change. These structures often date from colonial or even precolonial periods; they may have been designed for purposes wholly unlike those they have today and for conditions

similarly far different. Even where new local government systems are established supposedly de novo, this prehistory, reflected tangibly in interest groups and individual and community expectations, may push the system into the earlier procedural patterns, de facto if not de jure. Local administrative realities may be significant not only in constraining the freedom of movement of the rural economy but also in influencing the effectiveness of central government programmatic efforts to modify economic and demographic behavior.

An important determinant of the effectiveness of local administration--with respect both to regulation and control and to the provision of services--is the societal level down to which it operates. It is arguably impossible for government fully to coopt natural villages as administrative units, since the face-to-face contact that characterizes them generates local pressures and loyalties strong enough to capture any officialdom at this level. On the other hand, there are problems in having the lowest-level administrative unit too distant from the natural village. Historical evidence suggests that the administrative vacuum set up by such a gap will be quickly filled by informal political entrepreneurs, ready to broker relationships between government and governed and in the process forging a new, extra-administrative organizational system designed to maximize brokerage--a familiar "rent-seeking" outcome. Such systems grew up in the colonial period in South Asia as a result of attempts by the colonial authorities to extract revenues with minimal effort. The beneficiaries of the system comprise a powerful coalition that can block change. This administrative legacy has been a major impediment to rural development and achievement of lower fertility in both Bangladesh and parts of northern India.

The forms of local administrative organization, although at first sight something changeable at will or whim by government, in fact tend to persist. Successive governments may differ greatly in political orientation but be quite alike in their interests at the grass roots level (in civil order, revenue raising, and

mobilization for economic growth). Administrative designs tend to gravitate to those that have worked or been in place before. Promoting this structural inertia at supra-village levels is the spatial logic of markets and administration. In the former case this logic dictates an economic structure of marketing areas, typified by the hexagons of Christaller-Lösch central-place theory (see Whyte, 1982). Local administrative systems, not surprisingly, often make such areas into administrative units, adding selected government functions to the economic functions of market towns, seeking thus to transfer the stability of the one to the other. The commune in China was an administrative division roughly superimposed on the marketing area (see Skinner, 1965). In the African case traditional kin- or clan-based affiliative ties permeate the administrative structure and strongly influence its performance.

Two particular domains of government activity at the local level warrant explicit mention: public finance and the legal system. The development process, seemingly by necessity, entails a proliferation of line ministries and secretariats with increasingly specialized functions, each of which, once established, guards its administrative territory and actively seeks to expand it. What might once have been a modest and relatively unified civil administrative structure, with responsibility for police, a court system, revenue collection, and other basic public functions, multiplies into many parallel, often competing lines of authority. Public finance, on the expenditure side, becomes similarly specialized. Moreover, because power is husbanded at the center, any devolution of expenditure authority to lower administrative levels tends to be resisted. Even when an appreciable share of revenue is directly raised from the local population (the larger revenue sources are typically the more easily administered royalties and foreign trade duties), the rural taxpayer is unable to discern how his tax money is spent. In particular, he sees no evident connection between local revenue contributions and the quality or quantity of public services.

The absence of such a connection deprives government of a potentially powerful policy instrument. Just as a poorly designed fiscal system can be seriously detrimental to agricultural productivity, so too it can destroy (or prevent the emergence of) local initiatives in public services or infrastructure development that may be no less consequential. Moreover, a possible role in demographic outcomes may be envisaged. Demeny (1982: 5-6) takes the case of education as an illustration: "[T]he rules of central resource allocation ensure that if a local community somehow managed to have half as many children as their equally numerous neighbors, they would end up with half as many schoolrooms, teachers, and school books, all of a quality no better than their neighbors' children have access to." Centralized public finance systems thus tend to discourage quality-quantity tradeoffs at the local (and individual) level. The reverse would potentially be true of a decentralized system in which a significant measure of public financial accounting is confined to the local level. (See the later discussion of this policy direction.)

The legal system is another source of social-administrative incentives bearing on population change and the pattern and pace of rural development. Clearly, in its procedural manifestation, it may largely coincide with local community organization, in the case of much traditional law, or with local government administration, for statutory law. Separate treatment of this array of pressures and sanctions, however, is analytically helpful. In content, the areas of law that are most relevant for the issues of present interest are those concerned with property rights (including inheritance), contract, and the family (especially marriage and divorce). As important as the formal content of legal dictates are the de facto processes of application: differential perceptions and realities of legal sanctions and accessibility to redress, extent of extra-legal undermining of judicial processes or of their intended results, and the interplay of competing systems of law (customary, religious, and modern civil codes).

Even a minimalist view of the appropriate role of government in rural development would give high priority to its functions as guarantor of civil and property rights through the establishment and maintenance of an effective system of law and law enforcement. Much of what is thought to be economically inefficient in traditional agrarian systems is, at least in part, an institutional response to insecurity in property and civil rights. Demographic behavior is also at issue: both with respect to the effective uses of laws bearing directly on such behavior, and indirectly because the demand for children is partly security-based.

The International System

Finally, we should note for completeness that rural development and population change in the contemporary world are not only linked through the domestic economy and society but also through the international system. International institutions--the trade regime, capital markets, international law (supplemented by numerous covenants and treaties on matters ranging from the environment to human rights), and the organizations through which these are sustained or put into effect--play an independent mediating role in agrarian economic and demographic outcomes at the national level. A dense web of nongovernment organizations pursues an overlapping set of agendas in the international arena. Together with these tangible organizational realities, this external setting has important informational and cultural dimensions, conveying "lessons" (many perhaps misleadingly drawn) of policy successes and failures elsewhere, images of rich-country lifestyles, and suggestive routes of political development that increasingly bypass the filtering efforts of national governments.

International influence is transmitted most directly through the prices set in world markets, which countries are pressed to acknowledge domestically. The scope of policy action in various fields that can be contemplated by governments may also be constricted by international practice or by conventional wisdom--and a political or economic cost exacted for exceeding those limits.

And consumption preferences and normative expectations of what economic growth should bring to a large extent reflect behavioral patterns established elsewhere. The many and important issues raised by these routes and patterns of international influence on Third World agrarian economies and demographic regimes and on the direction of domestic policy in those areas would, however, take us well beyond the feasible scope of the present paper.

PATTERNS OF INSTITUTIONAL MEDIATION

The topics dealt with above we believe encompass the main institutional variables that should be weighed in analyses of interrelations between population change and rural development. No suggestion is intended that there are not other such variables that play a significant and even sometimes a salient role in the relationship. Identification of the institutional forms that are pertinent for a particular setting, time frame, and comparative purpose should be a critical part of the analyst's task.

With the need to take account of institutional contingencies in broad additional domains such as these, it might be thought that we risk having too many degrees of freedom for useful theorizing. A rural setting is now to be characterized not only by the standard economic measures--of factor endowments, technology, the organization of production, and intersectoral economic relationships--but also by family system, community structure, the design of local government, legal codes, even the international institutional environment. What once may have seemed a tractable, if complicated, analytical problem--amenable, for example, to simulation modeling--now eludes any such formal treatment. There are, however, enough commonly observed links among these various institutional domains to make it possible to delineate some "typical" patterns of rural development and population change, and, perhaps more important, some typical ways in which development and demographic transition are blocked.

The analytical task is that of dealing with institutionally contingent structures of incentives. For economic productivity,

the simple assumption of the individual rational actor remains the same, but the actor is now set in an intricate and shifting environment. For demographic behavior, individual economic incentives also matter. Children are expensive, and, as they enter their working life, become economic assets. How these costs and returns are typically distributed within the family and the broader population, and the level of risk and uncertainty seen as attaching to them, influence how parents, together or separately, evaluate (ex ante) their interests in particular family sizes and paces of childbearing. Different social systems impose different distributions, the unraveling of which by careful institutional analysis can shed much light on fertility outcomes. Analogous statements apply to migration.

This is not to claim that behavior in either domain is fully captured within an economic calculus. Even when such a calculus is conceptually stretched to encompass what to many might appear utterly noneconomic variables, it cannot in itself provide satisfactory explanations without additional *ceteris paribus* encumbrances. These are cultural in nature: the bases of preference systems, the categories through which the world is perceived, the unconscious culturally imposed limits of individual agency. It is uncontroversial to hold that fertility is influenced by factors enmeshed in the cultural substructure that carries a society's values and beliefs and is reproduced in each new generation. It is more controversial, because resisted by economists, to admit some residual cultural influence in more directly "economic" behaviors such as migration and activities directed at raising productivity. Cultural change of course does take place, but not necessarily in directions that can be predicted from a knowledge of changes in conventionally observed social and economic conditions. The once common notion that rural development entails transformation of hidebound, subsistence-minded traditional peasants into profit-maximizing, price-taking small farmers, or of semi-feudal clients into market-oriented wage laborers, has dissolved almost totally under the scrutiny of research over the

last several decades. What has taken its place is an acknowledgment both of the broad "rationality" of decisions across this development continuum and of the context-specific "boundedness" of that rationality in any cultural system.

Some illustrations can help to show how attention to institutional contingency at various levels of social organization fills out an explanatory picture of population-rural development interactions. Given the preoccupation with land tenure and labor market in the literature on those interactions, we will focus instead on family, community, and government. Three country experiences are drawn on: Indonesia, Bangladesh, and Kenya. In the very brief compass available, these are no more than outline sketches, highly simplified renderings of obviously complex patterns of social structure and change, albeit derived from a larger research base. While any such exercise risks imposing retrospective coherence on a process in which fortuity plays an appreciable role, we would maintain that the broad institutional "logic" portrayed in these cases properly reflects the empirical realities.

Local Government in "New Order" Indonesia

Indonesia's economic recovery and fertility decline since the late 1960s can be traced in considerable part to the political and administrative reforms undertaken at that time. (These paragraphs summarize several chapters in McNicoll and Singarimbun, 1983.) In the early 1960s severe economic mismanagement in Indonesia was reflected in a declining volume of exports, a balance-of-payments crisis, chronic food deficits and stagnant agricultural productivity, a visible deterioration of capital stock, and very high inflation--all making for an apparently bleak economic future. Over 1966-67, following rising political turbulence and (in 1965-66) extreme anti-Communist violence, a new political order was established. Under this "New Order" regime the economy flourished, Green Revolution technologies took hold and food surpluses appeared, and a rapid fertility decline set in.

Contributing factors to this dramatic turnabout were renewed large-scale foreign assistance and the (coincidental) surge of oil export revenues from the OPEC price increases. But particularly important for the rural situation was the changing character and roles of local government. The lowest formal administrative level in Indonesia's rural areas is the administrative village (kelurahan), usually comprising a group of hamlets (6-8 on average) with a total population in the range of 300-800 households. Its head, the lurah, is an elected official, although his term is indefinite and in some regions the post is virtually hereditary. The higher administrative levels, subdistrict, regency, and province, are headed by appointed officials (camat, bupati, and provincial governor). Roughly paralleling this civil administration is a military hierarchy extending downward from the commander of each military district, the counterpart in the larger provinces to the governor.

Two significant changes took place in this system after the mid-1960s: first, a considerable strengthening of its role and increase in its effectiveness qua administrative control, and second, devolution of responsibility for many aspects of development program performance to its lower reaches--regency, sub-district, and kelurahan.

The first of these changes can be seen as a series of responses to the political events of the mid-1960s. A thorough shake-up in the civil bureaucracy, especially in provinces such as East Java and Bali where the Communist Party had been strongest, led to a greatly increased proportion of military men, both active and retired, in provincial and local government positions. The security concerns of the military bureaucracy at all levels were intensified--toughening the civil bureaucracy, as one observer (Emmerson, 1978:83) put it, "with an exoskeleton of military command." Both civil and military administrations were enlisted in support of a new state party designed to establish a broad political base for the New Order government. The activities of other political parties were sharply curtailed. The combined

result was an administrative system much more able than before to translate government policy into action.

The second change, increasing local program responsibility, was made feasible by this enhanced efficacy and necessary by the mounting demands of the development effort. Indonesia traditionally had a large array of line-ministry programs extending down to the kelurahan, each attempting to work independently. One field study (Sinaga et al., 1976) identified no fewer than 60 programs under 12 separate government departments that in theory operated down to this level. While no single kelurahan could have had all or close to all of these programs in operation, the scope for confusion and the work overload on local officials are evident. When the policy process no longer stopped (as it once did) at the stage of planning and target-setting but was concerned too with resulting performance, there was little alternative to devolution of program authority and local program coordination. Increased power of the administrative hierarchy at the expense of functional departments was thus to be expected. The programs that were the main success stories of the New Order government were those that were able to work through or count on the active support of this hierarchy: rice intensification, a public works/employment creation scheme financed by per capita revenue sharing grants, and the family planning program.

Mobilization of local government and local community groups to bring informal pressures on eligible couples to use contraception was the chief distinctive feature of the Indonesian family planning program. The more routine logistical and reporting systems of the program also depended markedly on the newly coherent local administration. It is difficult to assess the degree to which fertility might have declined in the absence of such efforts. To some extent the economic and political disruptions of the 1960s may have impeded a decline that would otherwise have begun in that decade. The intense competition for secondary education that emerged with the 1970s expansion of primary schooling (and thus devaluation of primary school completion as a labor market creden-

tial) would plausibly have generated a strong tradeoff of quantity for "quality" of children irrespective of family planning program activity. At least in the early stages, however, few would deny a prominent role for local government in speeding the adoption of modern contraception in Indonesia. Fertility dropped from about 5.5 children per woman around 1970 to below 4 in the mid-1980s. Over the same period, agricultural production roughly doubled, again with significant assistance from an extension program that drew on government administrative resources.

This style of "top down" development has certain costs. At the kelurahan level there was a diminution of consensual village politics, as the lurah and other village officials took on more administrative (and shed representational) functions. The lurah had always held high status vis-à-vis his constituents; since the 1970s he tended in addition to become (de facto and in self-identification) a full-time government official. This trend toward cooptation of local community leaders into the national administrative system moved Indonesia away from concepts of village autonomy and self-reliant development made familiar from the experience of rural development in, say, Meiji Japan or (less certainly) post-1950 Taiwan. Local leaders were increasingly conditioned to look to outside, mainly government, assistance to stimulate "development"--in the form of funds, organization, and ideas.

Insecurity and Underadministration in Bangladesh

Bangladesh's rural population was expected to reach 100 million in 1990, having doubled over the preceding 30 years. It is growing at a rate that would double it again in the next 30. In contrast to this demographic dynamism is an agricultural economy that has performed disappointingly for many decades. In significant measure explanations for both trends can be found in the structure of rural social organization. (This description is drawn from Adnan, 1976-77; Arthur and McNicoll, 1978; Cain et al., 1979; and Cain and Lieberman, 1982.)

In any agrarian society, ties of kinship, patronage, and neighborhood cut across economic status divisions. They strengthen or weaken a person's claim on social product and modify his sense of risk or security. In Bangladesh, the nuclear or patrilineally extended family is the basic social and economic unit. Beyond his immediate household, a person has well-defined duties to his bari (homestead) and somewhat weaker ties to larger, kin-based groups (paribar and gusthi). For example, the bari often operates as a corporate entity with land held in the name of its head, who exercises patriarchal control over members. Kin groups may dominate in such matters as selection of spouse and negotiation of dowry or bride-price, the upbringing of children, and disposal of assets.

These extended family and lineage groups have more significance among the bigger landowners. Families with no land or only a house compound, for whom there is little economic rationale for emphasizing relations with close but equally impoverished kin, are more likely to seek alliances with leading surplus farmers in patronage groupings (shamaj, reyai). In exchange for allegiance the small landholder or landless worker may receive preferential employment, some support in bad years, seasonal credit, and other benefits. The leader in turn obtains a following to support him in local elections and disputes, as well as a sense of importance. The nucleus of a patronage group consists of the leader and his close relatives; wider membership typically comes from adjacent households within the village.

"Natural" villages or hamlets, the basis of rural settlement and local allegiance in much of Asia, are weak in Bangladesh. The natural village (gram) is socially defined, and its inhabitants have a clear perception of its territorial boundaries; but these units appear to have no corporate features, little cohesive identity, and only a residual degree of solidarity. An anthropologist (Islam, 1974:75) observes: "A man's duties are, in order, to his own family (bari), then toward his paribar, then to his gusthi and then to his village." Geographically determined settlement

patterns are partly responsible: in land subject to extensive seasonal flooding, small groups of homesteads are clustered on raised ground built up from surrounding flood plains; hence dispersed or linear settlements rather than nucleated villages are the rule. But the relative lack of function of villages in the society can also be traced to the colonial failure to provide effective local administration. In consequence, village life is segmented. A man may reside in one village, attend a mosque in another, patronize a market in a third, and cultivate plots of land in any or all of them. For adjudication of minor disputes he may call on the head of his gushti or on the leader of the shamaj to which he belongs; for assistance in ploughing or harvesting he may turn to other members of his paribar or to wage labor from distant villages.

Territoriality is not completely missing from Bangladesh social organization. The subvillage neighborhood cluster, the para, is sometimes a cohesive social unit, although it has little explicit role. And as already noted, patronage groupings also have a kind of territorial basis, albeit a fluid one. But for the most part, functions usually ascribed to the village community in descriptions of other peasant societies are filled in rural Bangladesh by a variety of nonresidential and overlapping groups with more or less specialized concerns. Kinship and patronage ties stand out as the most powerful organizing forces of rural society. They act as a simple, nonmarket distributive mechanism, channeling access and security downward. By binding together people of various social levels, they have tended to diffuse any strong manifestation of class. They have given the system some measure of stability.

It is not hard to see why fertility might be resistant to change in such an environment. First, there is or has been an apparent economic rationale for large family size. For affluent landowners, children represent opportunities for the family's occupational diversification and hence for expansion or consolidation of its local power. Lower down, among middle and poor

peasants, the evidence has suggested that children become net producers at a young age, while the consumption costs of early childhood tend to be sheltered within a patriarchal family; in addition, sons who have reached maturity by the time their father dies are an important source of security for the widow and indeed for the family's assets.

Reinforcing these economic considerations, the pattern of social organization in rural Bangladesh, sketched above, militates against the emergence of social pressures at the local level (or administrative pressures from higher levels) able to oppose high fertility. High fertility is no direct threat to the economic or political interests of kin and patronage groups--interests which in essence are those of the dominant families within them. The numbers and rights of the fringe membership of such groups can adjust to permit maintenance or further accumulation of per capita resources at the core. Families at or beyond the margins of the patronage system bear the major part of the short-run costs of continued high fertility in the society, although costs are shared more widely through the high levels of economic and mortality risk and through the uniformly disadvantaged position of women. In the longer run, the society has in a sense been transferring demographic costs into the future, mortgaging its own coming generations.

For a transition to low fertility to occur in Bangladesh, if this analysis is correct, the course of social and economic change would have to be such as to lessen either the opportunity for shedding demographic costs in this manner or the perceived advantage in doing so. It is far from certain that the natural pressures on the system generated by continued population growth will effect such a shift. More hope would attach to the prospect that productivity gains (from new crop varieties and better irrigation and flood control) will increasingly offer families routes of economic security and perhaps advancement not tied to the traditional order and not facilitated by high fertility. Cultural change toward the values associated with consumer societies and

improved status and opportunities for women, interacting with economic growth, would likely also contribute.

Obstacles to Peasant Proprietorship in Kenya

Kenya is demographically renowned for its rate of natural increase in the 1980s of 4 percent per year. Its rural population is estimated to have grown at over 3 percent per year in this decade and to have increased threefold, from 5.5 million to 17.2 million, in the period 1950-85.

Beginning in colonial times, Kenyan governments have encouraged and established programs to promote the orderly conversion of traditional systems of land rights into freehold titles. These efforts were accelerated as independence approached, with the departure of expatriate farmers. In effect, a new land frontier was opened. Large settlement schemes were set up to create smallholdings on much of this land; other programs financed the purchase by Kenyans of large farms from departing settlers. By the 1970s most of the country's agricultural land and a significant fraction of its pastoral land was registered as private freehold.

With population growth at its current rate (total fertility of around 7 children per woman, 5-6 of them surviving to adulthood), any agrarian system has obvious built-in instabilities. Two questions that immediately require answers in understanding the situation are: how is this growth being accommodated? and why does it persist? (Sources for the following are Livingstone, 1981; Dow and Werner, 1983; and Frank and McNicoll, 1987.)

On accommodation, both urban migration and rural labor absorption have been important, the latter more so. Urban migration typically took the form of individual, usually male, family members living in towns while their families remained on rural smallholdings. Leys (1984:181) wrote of this practice:

[For] most of the urban work-force the relations of production of their smallholdings...still predominated over those of their urban jobs. This is not to deny the reality of the urban culture of Nairobi, Mombasa or even

other towns. But it was a transient culture; even highly-placed civil servants commonly looked on some rural plot as "home"; four out of five wage workers wanted to retire to the countryside....

Leys saw this as a transitional stage in the evolution of a fully commercialized wage labor economy. However, later studies such as Livingstone's (1981) show the phenomenon continuing. The massive rural-urban migration that many observers had forecast, based on the pace of rural natural increase, has not (yet) come about.

In explaining how the rural sector has thus far managed to absorb and support its demographic expansion, Livingstone (1981:ch.10) describes what he calls a "sponge effect," operating chiefly through the subdivision of farms into smaller and smaller plots. Remarkably large gains in output per hectare are attainable by more intensive application of labor--even on half-hectare holdings. Other contributors to rural labor absorption are yield increases from improved crop varieties (notably, hybrid corn), exploitation of nonfarm activities such as wage-labor on estates, and migration to poorer agricultural or pastoral lands in semi-arid regions. The limits to these outlets appear close to being reached, however: at some point not far hence there could be a rapid expansion in landless poor and a much larger rural exodus.

Under such circumstances, why is there not a drastic downward adjustment in fertility? The reasons presumably must lie in the family system and the specific fertility incentives that are refracted through it. Kenya's traditional family system, like those of most other countries of sub-Saharan Africa (discussed above), is organized by lineage rather than by conjugal ties. Marriage was an alliance of lineages, the husband obtaining the labor and childbearing services of his wife (or wives) in return for bridewealth paid to her family or lineage. The household did not have a "pooled" economy. The wife's responsibilities were concerned with providing subsistence; the husband's, with cash crops or wage labor (often entailing physical absence). As

privatization of land progressed, the subsistence farm economy might have been expected to generate the incentives for fertility control that are seen in systems of peasant proprietorship in other parts of the world as child labor benefits diminish and child costs (particularly costs of education) rise. But in this case the subsistence farmer, the wife, was not the head of household. Her husband's preferences, sheltered from those immediate childraising burdens, continued to favor a large family.

Families in Kenya must of course greatly reduce their fertility before long if the agrarian economy and the social system are to survive. (Historically, Kenyan fertility must have been well below the 1980s level.) The family context in which they will do so remains somewhat speculative. Two directions of change can be suggested, both of which entail erosion of most remaining lineage influence and the reordering of the incentive structure away from high fertility. The first is the gradual nuclearization of families, with greater emphasis on conjugal ties and the merging of formerly separate gender interests. This is the trend forecast by J.C. Caldwell (1982) in his West African studies and explored by Thomas Dow and Linda Werner (1983) in the Kenyan case. Alternatively, it is possible that future family patterns in Kenya will more closely resemble those found in the (relatively) low fertility Caribbean countries today, where female-headed households predominate and visiting unions are common (see Frank and McNicoll, 1987).

To restate the point we made above, these highly compressed case materials--historical anecdotes--are presented to suggest the plausible significance of an array of institutional variables that too rarely enter the analysis of rural development-population relationships.

RURAL POPULATION AND DEVELOPMENT POLICY

We turn, finally, to policy issues. What policy directions and emphases follow from this perspective on rural development and

population change and how do they differ from or add to the familiar armamentarium of measures?

Policy goals are of course not affected. The objective of rural development qua process is rural development qua state defined by technological, structural, and welfare criteria. The objective of population policy is to modify demographic behavior and outcomes in ways that contribute to individual welfare and facilitate the development process (not just rural development). This would usually translate into efforts to lower fertility and promote health and longevity. In countries where there are no near-term resource constraints on rural population size, the case for moderated levels of fertility may still be strong, both to reduce pressures of rural-urban migration and to facilitate a more ecologically stable mode of resource use in rural areas. This is not, however, to rule out occasional instances where there is little reason for fertility limitation to be ranked high on the development agenda.

Mainstream Rural Development and Population Strategies

Consider next rural development strategies. "Mainstream" policies in rural development are principally concerned with issues of agricultural-sector scale of production, ownership, provision of technology, and "integration." In population, the mainstream comprises clinic-based programs for family planning and primary health care, and associated information and extension activities.

Scale and ownership. In Bruce Johnston and William Clark's (1982) important treatise on rural development, the chief classification of policies is according to the distribution of size-classes of holdings ("unimodal" versus "bimodal" or dualistic) and the type of ownership (private versus collective). The "East Asian" rural development model, derived from the experience of Japan, South Korea, and Taiwan, is built around the creation and support of a thriving small-farm sector. (This is the strategy advocated at length by Johnston and Kilby, 1975.) A structural

precondition is a moderate degree of equality in the distribution of landholdings--a situation that, perhaps fortuitously, emerged from Japanese feudalism and that was created by the post-World War II land reforms in Korea and Taiwan. Interestingly, the drastic early 1950s land reforms in China, combined with the early-1980s restoration of limited private tenure, to a considerable degree make China another, if belated, instance of the East Asia model.

In each of these cases, the political circumstances that made effective land reform feasible were highly exceptional. Land reforms elsewhere have typically been much less thoroughgoing--aiming, for example, at a more uniform distribution of operational units rather than at equity goals--and in practice more subject to circumvention. Moreover, where rural densities are very high and there is a substantial fraction of landless families in the agricultural sector, land reform may accomplish little for equity and less for productivity.

Peasant proprietors cannot, of course, be created by fiat. Neither the attitudes and values on the part of a farm family that make for the long-run stability and growth of a smallholding enterprise nor the system of support services required to sustain it in material terms is easily generated. Numerous instances of failures of frontier settlement schemes could be drawn on to illustrate this point.

"Bimodal" land distribution, in which a large-farm sector (occupying perhaps most of the cultivated area) coexists with a smallholder sector, is the norm in Latin America and is seen in parts of South Asia (in Pakistan, for example, and to a lesser degree in the Indian Punjab). It has been a goal of the Kenyan resettlement programs. While "success" cases are decidedly rarer, especially if success is defined in terms of poverty alleviation, complementary strategies to promote aggregate rural productivity growth and welfare improvement are clearly feasible under this land distribution pattern.

Technology. A second broad area of rural development policy is the provision of technology. Choices among available technologies, influenced by government factor pricing decisions and programs of agricultural extension, and, in the longer run, by government support of agricultural research, have implications for rural employment and rural-urban migration. Clearly, effective policy in this domain must mesh with the existing agrarian system--at least closely enough to seek to move it in directions better able to meet development objectives. Since much agricultural technology is also location-specific, an analogous meshing with ecological conditions is required. Implicit incentives to use inappropriate technology, research biased to favor the demands of large commercial enterprises at the expense of smallholders, or extension programs directed at men in agricultural systems where much farming is done by women are examples of the kinds of misconceived policies that are frequently seen.

Integrated rural development programs. Finally, also in the mainstream of existing rural development strategy, we should take note of integrated rural development programs. An integrated rural development strategy is "a coordinated approach...to improve infrastructural facilities and to provide credits, inputs, extension and managerial services to small farmers....In a 'best case' scenario, this strategy leads to productivity and income increases for small holders, agricultural improvements and diversification, and to the emergence of new community-based institutions which take the place of the many services and controls introduced by state agencies" (Lieberman, 1980:4-5). Emerging from the disappointing experience of "community development" and failed efforts to establish broad-purpose producer cooperatives in the 1950s and 1960s, integrated rural development in variant forms has been widely promoted in South Asia and Africa (see Food and Agriculture Organization, 1977). Less all-encompassing programs--food-for-work and guaranteed employment schemes, for example--can be designed along similar lines: the programmatic focus or span of concern is

in many ways less significant than the managerial design and organizational content of the particular effort. The strategy is administratively complex and prone to ineffectiveness as a result of too-heavy demands put on all-purpose field operatives. While such programs remain in place in a number of countries, the early enthusiasm for them has waned.

Family planning and health. Extension programs in some respects analogous to those in agricultural technology and practice operate also in the population and health field. The modern technology of contraception is purveyed through elaborate distribution networks of family planning clinics and supply depots; that of preventive and curative medicine through health clinics. Family planning "motivators" and nurses carry information and services to individual households. Nutrition campaigns disseminate information and sometimes food supplements to eliminate specific deficiencies. To a varying degree, in part depending on the inclinations and ability of governments and the medical profession to monopolize services, the private sector operates a parallel distribution network through local practitioners and pharmacies. In addition, a competing array of traditional treatments for illness and pregnancy, with corresponding traditional healers and midwives, may exist.

In the case of nutrition and health, the strength of underlying assumptions can be taken more or less for granted. (Medical anthropologists and social scientifically attuned public health experts, however, are now probing and in some cases questioning that strength--see, for example, Mosley, 1985.) That assumption is less readily justified in the case of modern methods of contraception, despite the improved convenience, effectiveness, and safety they offer--enough perhaps to induce a switch to them by users of traditional methods. Childbearing is obviously a highly consequential activity that is responsive both to economic and social structural changes affecting the costs and benefits of children to parents and to cultural changes affecting views of

individual autonomy, efficacy, and aspirations and instilled images of the family. The extent of additional program-specific effects is hard to gauge--although that does not prevent routinely expansive claims by program operatives.

Strategies to deliver public-sector family planning services can entail separate, vertically organized administrative structures or be integrated with health or other programs at the local level. The arguments for and against integration mirror those in agricultural development: whether extension workers are overloaded, whether a clearer line of authority and responsibility is needed, and so on. The range of actual program designs reflects more the inconclusiveness of this debate than purposeful tailoring of programs to different local conditions.

Mainstream population policy embraces more than these supply-oriented program activities, although its remaining content is often neglected. Rules of marriage can affect fertility levels, and to a limited extent may be modifiable through government action. Expansion of educational opportunities for women has many justifications, and hoped-for demographic benefits (lower child mortality and lower fertility) are among them. Immigration is responsive to policy given a minimal degree of government will and capacity. Regulation of internal migration, calling for more of both, is less often attempted.

Policy reinforcement. To what degree do these rural development and population policies reinforce each other? Many of the effects of policy success in rural development are associated with lower fertility: more efficient markets that facilitate transactions outside family and kin, the shift to nonagricultural activity where child labor is less helpful, increased incomes and resulting greater use of modern consumer goods, and so on. (Not all are. The evidence that a more equal income distribution--say, through land reform--leads to lower fertility is now called into question: see, for example, Boulier, 1982 and Cain, 1985.) With some exceptions (for instance, the continued high fertility seen in the

Soviet Central Asian republics despite, by Third World standards, relatively advanced agriculture, low mortality, and high incomes), success seems to breed success: with rural development comes falling fertility.

The style of rural development also affects rates of rural outmigration. Agrarian reforms typically influence capital intensities of production, wage levels, and the extent of use of family labor, all bearing on the level of agricultural employment. Latin America offers some striking illustrations. Under different agrarian policies, the massive rural exodus seen in much of that region in recent decades could perhaps have been lessened and hence also the high social costs that were (and are still being) incurred. Attention to potential labor displacement is now a routine part of mainstream agrarian policy debate.

Less can be said on the economic side effects of population policy, chiefly because of the major uncertainties as to what family planning programs accomplish in demographic terms. The fact that fertility declines by means of greater use of contraception supplied through such a program says nothing about the determinative role of the program in the decline. The same fertility decline, through the same or through other means, might have occurred without it. Moreover, the presence and operational effectiveness of a program in any given community may in part be a response to local demand--in turn reflecting shifting economic conditions and cultural patterns wholly independent of population policy. Most efforts to disentangle family planning program effects from socioeconomic effects through statistical means, popular as they are, cannot be taken seriously, given these large possibilities for misspecification (see Demeny, 1979).

At this juncture we might conclude that current mainstream strategies of rural development, focused on rising productivity with side-attention to poverty alleviation and economy-wide labor absorption, have favorable demographic effects in helping to bring down fertility; and that direct antinatalist intervention through family planning programs may well contribute appreciably to this

end. Such a conclusion, as we observed at the outset, would leave little content to the subject of "population and rural development": the intersection of the two domains in policy terms would be virtually empty. It is not in fact the conclusion we reach below. The policy considerations that emerge from the analytical approach taken in this paper suggest a more complex relationship, and one where policy conflict as well as policy reinforcement may be present.

"Getting Institutions Right"

We have space only for generalities whereas policy problems are intrinsically location-specific, rooted in a particular environment, culture, and historical experience. Yet generalities may still help in guiding policy thinking: poorly founded generalities (rife, we believe, in this subject) are a cardinal source of policy weakness.

Family systems: the limits of policy. Family structure, we have argued, plays a critical role in rural economic outcomes and in demographic transition. The family systems found in Northwest Europe and Japan were peculiarly suited to preservation of peasant agriculture under the fluctuating mortality of preindustrial times and to a fertility response to the economic threat represented by secular mortality decline. The different forms of adaptation found in the family systems of much of the contemporary Third World delayed fertility declines, although ultimately the economic and cultural changes associated with urban-industrialization, impinging on even quite remote rural populations, have brought about lower fertility within those systems. The distinctive family systems of sub-Saharan Africa, in which conjugal ties are weak and lineage ties traditionally strong, are still less amenable to fertility decline in response to changing socioeconomic circumstances. Continuing average family sizes in excess of six children among small landholders are the norm, even in land-scarce economies such as Kenya. As economic pressures intensify, adaptations in African

family arrangements conducive to or at least accommodating low fertility are likely to occur, but, as we noted in the Kenyan case, it is by no means clear what form those adaptations will take.

Even if we knew more about incipient changes in family structure, the scope for facilitating demographic transition through policy action directed at that level seems extremely narrow. One thing we do know about family systems is their resilience and persistence. The same is true of gender systems. The kinds of interventions that are available to governments and can pass muster on political grounds appear to have little purchase: typically, unenforced and unenforceable provisions of a civil code enacting "modern" family law. Another arena of action consists in efforts to alleviate women's disadvantaged status vis-à-vis men in pursuing their vision of their own and their family's economic and demographic interests--efforts that are defensible on many other grounds but that in the main have had indifferent success.

Community capacity and mobilization. The lessons of experience in rural productivity growth point to the strong advantage of individual, private incentives over group incentives. Even at the height of China's enthusiasm for collectivization, production brigades in that country converted the collective targets they were expected to meet into an intricate internal economy monetized with "work-points." But if collective effort is a poor competitor to an individualized reward structure, it very clearly is not so in one other function: that of expressing demands on a bureaucratic or politico-economic system. Where conformity of behavior is socially advantageous, as often may be the case with environmental protection and sometimes perhaps with low fertility, the social pressures that a solidary community can exert on its members are also not to be dismissed.

For effective community response, the existence of a social interest must be apparent, not simply asserted. There would be no question of such an interest, for example, for day-to-day law and

order: hence the harshness of the instant punishment often meted out to apprehended offenders by villagers. The case of fertility is much less simple. The existence of a community interest in control of population size depends on the extent to which the community can "mine" the rest of the economy. At one extreme is the community with a fixed territorial boundary and limited migratory options for its labor force--the best case might be English parishes in the 17th and 18th centuries, compelled by government to take responsibility for their own indigent. Social control of demographic behavior, notably marriage but sometimes also fertility, is then likely to be tight. At the other extreme--Bangladesh and much of sub-Saharan Africa might approach it--is the nonterritorial community, perhaps with a fluid fringe membership, concerned to increase the per capita assets of its core members; for it, fertility is unlikely to be an object of social control.

How do community forms therefore fit into rural development and population policy? That policies can effect changes in those forms is apparent: local government procedures and the permitted degree of local community autonomy and freedom of political activity are policy choices. Combining a free-market, individualized economy with a mobilized community demand on government services--a major factor, it seems, in attaining a decent quality of performance for services such as schools and health clinics--is a difficult balance. Adding a community role in population policy may destroy that balance. China, it can be argued, drew on community pressures in achieving its radical fertility decline in the 1970s, but found that the economic costs of mediocre agricultural performance necessitated a retrenchment in community roles and restoration of individual enterprise. Fertility policy implementation became more a purely government concern in the 1980s.

As a policy area, the functions of local (typically village) communities and their interaction with local government is potentially of great importance for both rural development and demographic change. The inclination of many governments to leave such

matters of social system design--one of the few parts of social structure where some degree of deliberate design might indeed be possible--to interior ministries or their equivalents, whose interests may extend little beyond political stability and security, is to forgo action in a broad field of policy development.

Government functions and competence. A third possible field for rural population and development policy suggested by this analysis is that of rural administration. Constituent policy elements might encompass issues of devolution of program authority and accountability to local government, improvements in the design of local fiscal systems, the extent of administrative interference in factor and product markets and more generally in the local economy, and the effectiveness of the legal system as it bears on economic and demographic incentives.

Devolution can only be contemplated if there exists an appropriate structure of local administrative units to begin with. Variations in cultural patterns, in dictates of climate and topography, in colonial administrative systems, and in the nature and degree of politicization that has accompanied emergent nationalism all make for a wide divergence of administrative structures among nations and often among regions within nations. Examples of relatively successful administrative devolution that can be drawn from Japan, Taiwan, South Korea, and in some respects China, and of the comparative failure of that strategy in Bangladesh, suggest the importance of this inheritance. But much may be achievable in administrative policy virtually de novo. As we noted earlier, few observers of Indonesia in the early 1960s would have predicted the emergence of strong and relatively effective local government that subsequently took place. Those who see no basis for a significant local governmental contribution to the development effort in contemporary African societies might be similarly undervaluing new organizational possibilities.

A policy prerequisite that may be missing in this whole field of administrative reform is a simple recognition of its importance,

and hence a marshaling of efforts toward institutional design. Raising the salience of these issues in policy debate, deliberate searching of the empirical record of experience elsewhere for relevant insights, and readiness to experiment would be critical steps forward.

Culture, Institutions, and Policy

The intent of rural policy is to establish institutional settings conducive to socially desired patterns of economic and demographic change; the realities of the policy problem are far less cut and dried. Perhaps because in one of its meanings the word "institution" can refer to a public building, it is common to exaggerate the tangibility of institutions in the more general, abstract sense of the term that is used here. This tendency in turn breeds too sharp a conceptual division between institutions and culture. Culture comes to be seen as something ethereal, pervading but only marginally constraining the individual-level transactions and interests that give rise to institutional patterns--and largely irrelevant to the hard-edged social engineering that supposedly is the real stuff of policy (see McNicoll, 1978). While important insights into institutional forms can be gained by analyzing their constituent transactions--that is the program of the so-called new institutional economists and of methodological individualists in sociology--the imputation of a thoroughgoing present-time rationality to those existing forms is unwarranted. To do so is to trivialize the role of historical accretion in forming a social structure and the variety of cultural forces sustaining behavioral patterns. It is also to understate the potential sources of resistance to efforts at institutional reform.

The problem is not resolved by proclaiming culture, still institution-free, to be the real source of social change and hence the proper if elusive object of policy action. In this view, as extreme as the institutional determinist's, major behavioral change is seen as a manifestation of cognitive shifts in apprehending the

physical and social world. Institutions are subordinate and dependent phenomena and the efforts to make sense of them an empty endeavor. Policy must therefore win hearts and minds, not cater to material interests within a logic of collective action.

If we reject such all-or-none treatments of cultural influence, and recognize the historical layerings of institutional forms and their economic and cultural supports that make up the organization of any complex society, what follows for policy? Perhaps the main implication is that policy designs will not be readily transferable among settings. In rural development as in many other fields, a welter of policy advice and instruction is showered upon Third World governments, occasionally sought, more often proffered gratuitously or with implied sanction. The lessons, transmitted with casual certitude, are selective distillations of policy experience elsewhere. Yet what has "worked" in facilitating economic growth and demographic transition in any particular set of circumstances may often have been inadvertent--the outcome attributable to features of the local setting that had no part in any policy deliberation or weighing of alternatives. What should be of more benefit to genuine policy debate in such countries are the materials from which to draw relatively low-level insights into policy accomplishments and failures.

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