Essay

Culture and "Economic Development"

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A FEW YEARS AGO, AS A CONSULTANT for the World Bank, I reviewed materials in Bank files on 68 completed rural development projects from all over the world.[1] My instructions were to assess the sociocultural variables that had affected such projects, most of which had been designed during the 1960s and early 1970s, when planners were much less convinced than they appear to be now about the need for sociocultural expertise throughout the project cycle. Many of the projects I reviewed illustrated a tendency to stress technical and financial factors and to neglect social issues. I draw on that study here, along with my other development experience, in commenting on problems that anthropologists encounter and strategies we may use in sensitizing planners to the importance of culture. I also outline some general and specific cultural components of the development process.

An issue that frequently emerges when culture and development are discussed is the relationship between cultural factors and the measurement and evaluation of project success. Sometimes a contrast is posed between quantitative evaluation in financial terms and qualitative evaluation of cultural impact: A positive effect on GNP may be accompanied by an adverse effect on the "quality of life." However, the rivalry between economic goals and cultural well-being need not be as severe as is often supposed. In my comparative study the average economic rate of return for culturally compatible projects (19%) was much higher than that of incompatible ones (less than 9%). In other words, attention to culture also pays off economically. (Parenthetically, I should mention that sociocultural compatibility was coded independently of economic rate of return, so as to avoid the possible tendency to identify projects as culturally incompatible once they were known to be economic failures. Only after the sociocultural coding was done were the rates of return, which were listed on separate data sheets, examined.)

The Fallacy of Overinnovation and Romer's Rule

Compatible and successful projects avoid what I call *the fallacy of overinnovation* and are instead applications of Romer's Rule, taken from the paleontologist A. S. Romer (1960), who used it to explain the evolutionary emergence of land-dwelling vertebrates, as follows. The ancestors of terrestrial vertebrates were animals that lived in pools of water that disappeared during seasonal droughts. During the Devonian period, legs gradually evolved out of fins, not to permit animals to live full time on the land, but to enable them to get back to the water as pools dried up. A feature that proved essential to land life originated to maintain an aquatic existence.

Systems theorists, paleobiologists, and social scientists alike have used Romer's Rule to predict and explain change. The general lesson is that *the goal of stability is the main impetus for change*. Evolution occurs incrementally as gradually changing systems keep on attempting to maintain themselves (as they gradually change). Because development is, after all, simply another term for (planned) socioeconomic evolution, Romer's Rule is

applicable. To apply it to development is certainly not to oppose change (as some planners have argued with me that it is). After all, the emergence of legs, which prompted Romer's Rule, was certainly a highly significant innovation and was to provide vertebrates with multiple paths of diversification and development.

The application of Romer's Rule to "economic development" suggests that people are unlikely to cooperate with projects that require major changes in their daily lives, especially ones that interfere too much with customary subsistence pursuits. Applying the rule, we can infer that development "beneficiaries" usually wish to *change just enough to maintain what they have.* Although people do want certain changes, their motives to modify their behavior are provided by their traditional culture and the small concerns of everyday existence. Their behavioral values are not abstract "planners' values," such as "learning a better way," "progressing," "increasing technical know-how," "improving efficiency," or "adopting modern techniques." Rather, they have down-to-earth and specific objectives, such as maintaining yields in a rice field, amassing resources for a ceremony, getting a child through school, or paying taxes. The goals and values of subsistence cultivators differ from those of people who produce for cash, just as they differ from those of development planners. These value systems must be taken into account during planning.

Following Romer's Rule, realistic and workable projects promote change but not overinnovation. Implicit in all the successful projects I examined was the goal of changing so as to maintain—preserving systems while making them work better. The successful projects respected, or at least did not work in opposition to, local cultural patterns. They either had an appropriate social design for innovation at the outset, or they developed one during implementation. Most of the successful projects incorporated indigenous cultural practices and social structures.

Some examples are in order. Irrigation projects that aimed at rehabilitating, improving, or expanding existing systems were more successful than projects designed to create entirely new structures. Economic reasons for this lie in the "sunk cost" of previous investments, but the correlation also has sociocultural underpinnings—that is, tradition and familiarity. Similarly, a tea project in East Africa worked best in areas where farmers already cultivated tea. Also successful were coffee projects in Ethiopia and Burundi, because they aimed at each country's leading export and number-one cash crop, traditionally cultivated by smallholders. The most successful part of one fisheries project was the provision of spare parts for boat owners. Another successful project involved experienced South Asian irrigators who could easily adapt to increased water availability and the more rigorous time frame imposed by double cropping. Given a free market for paddy, project farmers, who traditionally both ate and sold rice, stepped up production and increased their incomes.

Another illustration of Romer's Rule is an East African cattle project. Although halted before completion because of political upheaval, it was judged one of the most successful livestock projects in Africa. It introduced cattle herding to a region recently freed of tsetse fly infestation. The project made good use of, rather than conflicting with, local and regional conditions. Examples: (1) Appropriate stock was introduced from a neighboring country; stock was therefore adapted to regional ecology. (2) Cattle grazing was a culturally appropriate activity in the region; previously, people had been prevented from herding in the project area only because of tsetse fly infestation. Once this barrier was removed, people simply extended their traditional practice to fill in a new niche. (3) The project used a mixture of types of productive units: government ranches, a cooperative ranch, and private ranches. (4) Project aims were compatible with traditional land tenure, in which fences and small farms were customary and proved compatible with project private property and grazing goals. (5) The national population was sufficiently concentrated (national population density of 53 per km^2, but higher in the project area) for effective supervision, extension, animal health care, marketing, input delivery, and so on.

Participants in a successful Papua New Guinea palm oil and resettlement project used their profits just as Romer's Devonian amphibians used their finlike legs—not to forge a brand new lifestyle, but to maintain their ties with home. They constantly revisited their homeland and invested in its social life and ceremonies. This cash-crop-based project was compatible with widespread Oceanian cultural values and traditional socioeconomic systems based on competition for wealth and capital accumulation. The settlers came from different tribes, but interethnic and interlinguistic mingling were compatible with local experience. In Papua New Guinea, interlinguistic marriage is common, as is multi-tribal participation in common (religious) movements oriented toward material benefits (i.e., cargo cults).

By the way, a model of development following Romer's Rule is in no way incompatible with government changes or social revolutions that reallocate land rights in highly stratified areas. If these changes permit smallholders to continue cultivating traditional fields in return for a greater share of the product, they can be very successful.

Sociocultural Incompatibility

In demonstrating to planners the value of the cultural dimension, discussion of projects that failed because they disregarded local culture can be important. Indeed, many project incompatibilities have arisen from inadequate attention to, and consequent lack of fit with, existing sociocultural conditions. For example, a very naive and socioculturally incompatible project was an irrigation and settlement scheme in East Africa. The project was eventually canceled and redesigned following government change and land reform. The project overinnovated. Its major fallacy was to attempt to convert nomadic pastoralists into sedentary cultivators. Traditional land rights were ignored. The herders' territory was to be used for new commercial farms, and the pastoralists converted into small farmers. This project was designed to benefit not the herders, but wealthy commercial farmers. Despite obstacles that would have been obvious to any anthropologist, the pastoralists were expected to give up a generations-old way of life in order to work three times harder growing rice and picking cotton for bosses.

Another counterexample to Romer's Rule was a South Asian project that promoted cultivation of onions and chilies, expecting them to fit into a preexisting labor-intensive system of rice growing. Cultivation of these cash crops was not traditional in the area, and it conflicted with existing crop priorities and other interests of farmers. The labor peaks for chili/onion production coincided with those for paddy. Confronted with this situation, farmers gave priority to the traditional subsistence crop, and the project failed.

A South American irrigation project also conflicted with established cropping patterns. It attempted to get farmers to shift from perennial to annual crops at a time when the price of the perennial crops was rising. Furthermore, the agency chosen to implement the project had no agricultural development experience, and project objectives depended on modern machinery, which was unavailable in the area. Similarly, a Middle Eastern irrigation project expected farmers to give up a year's cotton crop without compensation. A West African project asked farmers to spray only immature cocoa trees, when tradition, efficiency, and cost-effectiveness all dictated that the older trees alongside them should also be sprayed.

An economist might assert that these problems stemmed from faulty economic analysis, rather than from lack of a cultural perspective. However, this assertion arises from a nonanthropological view of the economy, as a separate sphere, rather than part of a local cultural system. To be sure, a skilled microeconomist as readily as an economic anthropologist could do the local-level fieldwork and analysis needed to prevent and monitor these kinds of project problems. However, someone must do it—that is, pay close attention to the local system being affected by development. All too often development experts are content to talk with officials rather than smallholders, and to stay in national or regional capitals, rather than visit, much less live in, rural areas. However, it is precisely

in these target areas that investigation, planning, monitoring, and evaluation are most needed throughout the project cycle.

Sometimes development agencies ignore sound pre-project advice and proceed with ill-conceived projects anyway, as in the following African beef cattle project, which can serve as a model of how *not* to administer aid. Project designers disregarded the preparation team's advice against establishing ranches in the project area because ranching would conflict with existing land-use patterns. Planners also ignored basic and easily available information about the project area (e.g., presumably nonexistent villages shown clearly on maps). During implementation a few thousand previously unnoticed local people tore down fences, burned pasture, and rustled project cattle. Local people continued guerrilla action against the alien ranches on their ancestral lands, and project problems diminished only after expatriate management was replaced with nationals, who used traditional pacts (blood brotherhood) between villages to end the rustling.

Inappropriate strategies have been especially damaging to livestock projects, 67% of which were judged culturally incompatible, versus 50% overall among the projects I reviewed. Many livestock schemes have been egregious counterapplications of Romer's Rule, illustrating the fallacy of overinnovation, and incorporating socially insensitive development strategies that justify change in terms of abstract goals rather than locally perceived needs. Few livestock projects attempted to fit changes to local needs. Rather, most tried to mold local conditions to follow a Western-derived blueprint—the assumption that livestock practices that have succeeded in Australia, New Zealand, and the United States can and should be replicated throughout the world. Whatever technical advantages this livestock model may (or may not) offer, it is often socially incompatible. Appropriate social design must draw on preexisting units and use, rather than oppose, traditional beliefs and values. Culturally appropriate alternatives are needed to the ubiquitous ranching model of livestock development.

The Fallacy of Underdifferentiation

The *fallacy of underdifferentiation* refers to planners' tendency to see LDC's (less developed countries) as an undifferentiated group. (The term LDC implies such a lumping; Brazil is not Botswana, but both are classified as LDC's.) This fallacy is apparent when an international development agency ignores cultural diversity and adopts the same approach with very different types of "beneficiaries." One illustration is the failure to distinguish between tribal small herders and businessmen-ranchers in many livestock projects. In South American livestock projects, for example, sub-loan recipients are usually literate, educated, experienced, and often fairly wealthy. These ranchers have little need for, and often reject, programs of technical assistance that seem to be included just to fit a development blueprint. Such nations as Brazil and Uruguay have correctly insisted that national rather than expatriate experts can be found to manage projects. Projects can avoid the fallacy of underdifferentiation by paying attention to cultural diversity and the specific resources available in particular countries. Social and economic benefits follow when projects are culturally compatible, when they harness existing resources and traditional organizations, when they address locally perceived goals for change, and when they have proper (and flexible) social designs for implementation.

Participants' Groups and Cooperatives

Although planners are fond of encouraging "community self-help" and the formation of cooperatives, traditional local social organization is rarely analyzed in depth. Some of the detrimental results include: (1) groups with development potential are ignored (cf. Cernea 1987); (2) inappropriate, unworkable, or unnecessary new organizations are formed; and (3) assumptions about individual motivations conflict with traditional communal values.

Instead of regarding traditional organizations as a hindrance, such groups should be identified and harnessed as a resource for development. There appear to be two main reasons why the development potential of traditional social organization is so rarely tapped: (1) inadequate socioeconomic knowledge in planning, and (2) use (often unconscious) of culturally biased and incompatible social and cultural designs for innovation based on Euro-American (including modern socialist) property concepts and social units.

The faulty social design of incompatible projects has generally been based on either (1) Euro-American social groups and property concepts—individualistic productive units, privately held by individuals or a couple and worked by a nuclear family (parents and children), or (2) cooperative systems at least partially based on models that have been used in Eastern Bloc and modern socialist countries.

One example of an inappropriate nuclear-family-farm model was applied in an area of West Africa where the extended family was the basic social unit. The project succeeded despite faulty social design, because the participants went right on using their traditional extended-family networks to attract additional settlers. Settlement became spontaneous and cost-effective. Eventually, twice as many people as anticipated benefited, because members of the extended families of the original settlers joined them in the project area. In this case settlers were neither the European farmers modeled at appraisal, nor the cultureless beings of a planner's settlement blueprint. In their new setting they, unsurprisingly, were active beings who used principles of their traditional society to structure their new one.

The second dubious foreign model used frequently in development strategy is the cooperative. In my survey, newly formed cooperatives fared badly. Cooperatives without direct access to markets were weak from the outset. Large hierarchical cooperatives failed to give farmers a feeling of trust and individual care. Other cooperatives were too small to support managers, accountants, and staff and gave members returns below those from private merchants. Other cooperatives failed because they ignored women's role in production.

Cooperatives tend to be most successful when they harness preexisting, local-level communal institutions. This is a corollary of a more inclusive rule: participants' groups are generally most effective when based on traditional social organization or on a socioeconomic similarity among members. Some examples of success from my comparative study are: (1) groups based on local and regional descent groups in Africa; (2) small groups of traditionally connected, socioeconomically equal tertiary canal users in a few areas of Asia; (3) traditional, ranked groups in West Africa; and (4) groups of literate middle-income settlers in Peru and Malaysia.

Third World Models for Third World Development

Because neither foreign model, the individualistic family farm nor the cooperative, has an unblemished record, an alternative is needed: greater use of Third World social models for Third World development. These models include clans, lineages, and other kin groups with communally held estates and resources.

The social design for change should be founded in the traditional social forms of each target area. However, we should be aware that use of traditional groups as implementation units may contribute negatively to equity. For example, in a successful West African irrigation project, traditional leaders drawn from "noble" families formed effective production groups and cooperatives to purchase and maintain equipment. However, this implementation strategy was reported to have reinforced income disparities, because only 14% of the beneficiaries were people with low incomes, and because absentee landlords and nonfarmers received special benefits. In some other projects in which members of farmers' associations were the wealthier producers, these became lobbying bodies with interests at variance with those of the poorest people.

Equity

A conflict between production goals and equity goals arises in many highly stratified nations. If projects are to increase equity (often one of their stated goals), they must have the full and forceful support of reform-minded governments. However, just as peasants oppose projects that interfere too much with their basic economy, people accustomed to wealth and power also resist projects that threaten their vested interests, and their resistance is usually more difficult to combat. Some project types, particularly irrigation schemes, are more likely than others to widen wealth disparities. An initial uneven distribution of resources (particularly land) often becomes the basis for greater skewing after the project. The negative social impact of technical innovations tends to be most severe when they are channeled to the rich, as with "green-revolution" technology in Java (Franke 1977), where new techniques were adopted mainly by the richest farmers. Among the socially undesirable results: harvesting machines rendered the hired labor of poorer villagers superfluous and enabled the rich to farm lands they had formerly parceled out for sharecropping. Deprived of their traditional tenant farms and jobs, the poorest villagers migrated to cities in search of work, but most joined the ranks of the urban unemployed.

Many fisheries projects have also had negative equity results. In Bahia, Brazil (Kottak 1983), existing sailboat owners were preferred recipients of motorization loans, because they had collateral and a proven fishing record. The repayment costs for the new technology, however, led them to increase the owner's share of the catch. They used their rising profits to buy larger and more expensive boats. The result was the creation of a stratum of wealthy people within a once egalitarian community. This hampered individual initiative and further development of the fishing industry, because with new boats so expensive, ambitious young men who once would have sought careers in fishing no longer had any way to obtain their own boats. To avoid such results in fisheries projects, credit-granting agencies must seek out enterprising young fishers rather than giving loans only to established owners and business people.

However, the goal of keeping wealth disparities from widening is not always clear-cut. How do we recognize inequality when we see it? Inequality takes different forms; social ranking is not the same as socioeconomic stratification. Systems of ranking based on slight or age-based contrasts in status, wealth, or power, rather than full-scale class systems, are common in underdeveloped areas. In many parts of the world, the fundamental units of social organization are clans, lineages, and other kinds of descent groups. Often, descent branches are ranked above others, perhaps being considered "noble," although the actual differences in wealth and power between branches are slight. Furthermore, with descent group structure, elders often control their juniors' labor and access to resources. However, because young people will eventually become elders, the situation contrasts with socioeconomic stratification, in which differences in wealth and power are substantial and lifelong.

In one Malagasy irrigation project, many of the wealthy and "noble" landlords who were considered to be drawing disproportionate benefits were discovered through later analysis to be clan leaders holding estates in trust for numerous dependents. A lack of social expertise in the first evaluation team resulted in the erroneous conclusion that the project had had a substantial negative equity impact, which my own later analysis showed to be false. We need to know more than in whose name land happens to be legally registered, because descent group members often benefit from what is, on closer analysis, a joint or communal estate.

Projects with equity or income redistribution goals need a social strategy to promote and monitor equity impact. The equity evaluation strategy must take care to distinguish between ranking and social stratification. The contribution to increased production made possible by building on traditional *ranked* groups may outweigh a slight negative equity result. In the context of *stratification,* however, equity will be more of a problem.

Development programs need to funnel benefits to the neediest villages and districts. However, precise socioeconomic data are rarely available about the location and size of the poverty pockets that many projects seek to eliminate. Here is a specific area in which social experts, indigenous or foreign, who are familiar with the country, can help identify needy villages and ensure that project benefits reach their targets.

Of course, decisions about how much inequity will be tolerated will, in most cases, be made by governments. Not all projects will have equity goals. Equity takes a back seat to production goals in livestock projects that provide credit to experienced (middle- and large-scale) ranchers. Given the generally dismal record of livestock development projects, this strategy has been one effective way of increasing meat supplies and achieving satisfactory financial returns. It is also obvious that many governments are not interested in equity and act, or permit vested interests to act, so as to oppose it.

Levels of Culture in Development: Planners' Culture

The first level of culture relevant to development is the *local level,* on which I have focused.

A second level is *national culture,* consisting of the traditions, policies, goals, resources, and characteristic procedures of each nation. Government taxing and pricing policies, for instance, affect incentives to produce and sell. At the national level, interest groups jockey for advantage, and vested interests oppose threatening changes.

The third level is the *culture of the planners.* Association with the same international organizations and functions creates a subculture that to some extent overrides national, ethnic, and individual differences between planners. Furthermore, any single development organization, such as the World Bank, is a multilevel sociocultural system with its own traditional organizational goals, communications networks, information flows, authority lines, territorial imperatives, rewards, punishments, associations, conflicts, rituals, habits, and decision-making procedures. This cultural dimension of development—the culture of planners—has hitherto been accorded too little importance.

In an insightful article about development strategy, David Korten (1980) contrasts the blueprint model, which is typical of the culture of planners, with a "learning-process" model that he considers more useful and cost-effective. The learning-process model involves the prospective beneficiaries in a flexible project that they initiate and help plan.

The efficacy of the learning process model is predicated on the fact that projects are most likely to succeed when directed toward the target population's proven expertise, and when they address locally recognized needs and make proper use of existing social structures. Such projects apply Romer's Rule and are not based on abstract goals of development for its own sake. The culturally specific incentives necessary to obtain local participation will become apparent in each case through socioeconomic and cultural study in preparation and appraisal. If existing groups are to be used in implementation, their social characteristics, numbers, effectiveness, and location should be thoroughly known and the manner of their use clearly charted.

The need for greater attention to local culture will not invariably require that international agencies assign a foreign social expert. Governments can rely on indigenous social expertise and offer sociocultural training to agency staff. However, rural development planning does require rural fieldwork. Implementation and evaluation, both by national and international agencies, must be based on visits to villages and interviews with affected people, who must come first throughout the project cycle. The role of the social expert should not be to legitimize decisions made by others, but to play an active role in project planning and to elicit the people's input.

The role of national social experts in the translation of local cultural needs requires some discussion. It is often claimed that LDC scientists trained in Western countries acquire Western viewpoints, and that this creates a rift between those policymakers and the people. However, it isn't the Western training per se, but the correlated elitism and isolation from the countryside that produce insensitivity to local culture.

Generalizations and Recommendations

Is it possible to develop a global strategy relating to the sociocultural dimension of development, or should strategies be region-specific or even society-specific? Each project does require its own sociocultural analysis, monitoring, and evaluation. To ensure cultural fit and to avoid the fallacy of underdifferentiation, specific development strategy must be based on the distinctive features of each cultural system being affected. Nevertheless, several generalizations and recommendations concerning the cultural dimension are possible. Some are middle-level; others, more general.

The middle-level generalizations apply to particular regions (e.g., sub-Saharan Africa) or project types (e.g., irrigation). An example of a region-specific recommendation, most applicable to sub-Saharan Africa or Oceania, would be to harness descent-group organization for project implementation. Certain development strategies should be specific to project type: irrigation, livestock, settlement, or fisheries. For example, recommendations can be made for projects that promote such forms of intensive cultivation as irrigation and double cropping. We can generalize that the most successful of such projects will be in densely populated areas, because either a year-round labor supply or reliable machinery is necessary for intensive land use. Dense population also facilitates implementation, because human labor is concentrated and farmers easier to reach. Double cropping, the cultivation of two successive annual cereals on the same piece of land, is not normally viable in areas of sparse population, such as much of sub-Saharan Africa. Any proposal for double cropping should be based on analysis of labor and machine availability and farmer incentives.

Traditionally, peasants intensify production in order to (1) meet subsistence needs, (2) pay taxes or rents, or (3) meet social, particularly ceremonial, obligations. For example, the main reason why peasants in Madagascar (Kottak 1980) want cash is to purchase ceremonial goods. Yet in some cases planners have mistakenly expected them to adopt double cropping, using the first crop for subsistence and the second for sale. This expectation ignores the fact that peak labor demands for the second crop would compete directly with ceremonial activity, without which the main incentive to grow a cash crop would disappear.

Although the need for cultural understanding is general, some projects call for an especially sensitive sociocultural strategy. For example, effective extension is particularly important in projects aimed at herders, who are characteristically mobile and dispersed. One recommendation is that in Africa's pasturelands, lower-level extension workers should target their efforts at heads of descent groups and other nodal figures in mobile social networks, or attract them to central places. Elsewhere (Kottak 1985) I have proposed specific models for livestock projects (and for settlement projects), depending on particular cultural and demographic features of target areas.

To summarize, any outline for incorporating the cultural dimension in "economic" development should include the following:

1. Planners should consistently draw on cross-cultural knowledge and social expertise in planning, implementation, and evaluation of each development project.
2. Planners should pay attention to cultural diversity and compatibility, including culturally appropriate incentives in the design for implementation.
3. Projects should apply Romer's Rule rather than overinnovating. Change should respond to locally perceived needs rather than to abstract goals.
4. Planners should harness existing social units and lines of authority as part of the implementation strategy.
5. Most generally, potential beneficiaries should be involved, their input enlisted, in project identification. Development strategy should rely more on spontaneous, people-generated ideas and units, and less on higher-level plans and decrees. There should be greater use of the "learning-process model," and less of the "blueprint model."

Notes

Acknowledgments. This essay builds on a keynote speech, "Dimensions of Culture in Development," I delivered to the Symposium on the Cultural Dimension of Development, sponsored by the Netherlands National Commission for UNESCO and held September 16–20, 1985, at The Hague, Netherlands (see Kottak 1987).

[1]A more detailed account of that study is given in Kottak 1985.

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