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WHAT HAVE WE LEARNED?
THE ROLE OF GOVERNMENT IN AGRICULTURAL DEVELOPMENT

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WHAT HAVE WE LEARNED?
THE ROLE OF GOVERNMENT IN AGRICULTURAL DEVELOPMENT

C. Peter Timmer

The 1990s will be a challenging decade for economists working to reduce poverty and speed agricultural development. Not only were the 1980s a "lost decade" for many countries of the Third World, especially in Africa and Latin America, but the turn of the decade brought Eastern Europe, the Soviet Union, and much of socialist Asia back on the agenda of development economists. Suddenly the questions asked about the role of government in the development process take on new urgency as the observed range of economic structures and interventions widens dramatically.

Many countries newly independent after World War II sought their models for development strategies in the Soviet example, with its massive displacement of market forces by central planning and the decimation of agriculture in support of forced-pace industrialization and an urban proletariat. Eastern European countries had the model imposed on them by the Soviet Union. Four decades later, the legacy of Stalinist economics is the ruined economies of Poland, Czechoslovakia, and the rest of Eastern Europe and the Soviet Union, with their outdated industrial sectors, backward agricultures, and near vacuum of market institutions. There is near unanimity in Eastern Europe that casting off the Stalinist structure as quickly as possible is imperative and that the only feasible way to do it is by introducing unrestrained "Dickensian" capitalism. The state can be trusted with nothing but defending the border.

The legacy of the Soviet model extends to much of the Third World as well. But there the response to the political revolutions that swept Eastern Europe and the Soviet Union at the end of 1989 has been much more muted. The current approach in Prague and Warsaw, which would have been unthinkable there only two years ago, is still

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strongly challenged in the Third World. However, the intellectual revolution that transformed tax codes in rich countries and privatized state-owned enterprises in poor ones has provided the foundations for an entirely new balance between the public and private sectors. Perhaps the most perplexing question now is how far the pendulum must swing against state intervention on behalf of economic growth and social goals before there is a return to the type of mixed economies that still prevail in the United States, Western Europe, and the highly successful societies of East Asia. Must countries live with the abuses and inequities of full-blown capitalism in order to get rich? Indeed, will a hands-off approach and free markets even allow poor countries to get rich? Can we identify the nature of those states that can be trusted to intervene on behalf of economic growth and social welfare and be able also to spot the incipient venal or corrupt state? If so, what kinds of pressures can be brought to bear to steer societies in the right direction? Are ideas and articles enough? Can pressures from the donor community be productive?

These are, of course, ancient questions, but the historical record from the successful developing countries in Asia suggests an underlying consistency to how they might be answered. This growth record and consistency should give pause to proponents of free markets and minimal state intervention as the surest path to riches. In fact, it is often difficult to judge, in a particular situation, whether government interventions or market forces would be most effective in promoting economic development and broad-based increases in material welfare. Whether the issue is price policy, trade strategy, employment schemes, rural development projects, or the management of food aid, the question of when to intervene to alter market-determined outcomes is at the core of both analytical and political debates.

Analysis of all these issues is almost always conducted on the premise that adequate market institutions exist for neoclassical models to illuminate the nature of alternative equilibria resulting from different types and degrees of government intervention. This is precisely the premise that does not hold in most of the socialist countries now embarked on structural and political reform, nor does it hold in most developing countries. It is one

reason why development economists, with their concern for structure and market failures, may have more insights into how to pursue those reforms than economists who primarily study Western economies.

The nature of the state, including its political legitimacy, ideological orientation, and bureaucratic capacity, provides one crucial element in determining when to intervene. But other elements are also important. For example, the competitive pressures Vietnam feels from successful neighbors--especially Thailand, Taiwan, Malaysia, and Indonesia--have pushed it into restructuring an economy nearly destroyed by ideological commitment to state socialism. The economic reforms in Vietnam far surpass any yet accomplished in Eastern Europe, whereas political reform lies frozen, as in China. One emerging wisdom of economic reform in Eastern Europe is that only popular democracies can engender the political support needed for the painful readjustments that come with the introduction of untrammeled capitalism. Such wisdom must surely be reconsidered if the shock treatments fail to produce faster economic growth than now seems likely in Vietnam.

Personalities also matter. Leadership qualities and personal values of individual leaders can wreck a rural economy, as in Tanzania, or rescue it from decades of urban bias, as in Indonesia. The revival of interest in the role of monarchies in establishing political unity and social cohesion reflects this realization that "nation-building" requires more than an independence movement sitting with the reins of government.

The implications of different types of governments for the basic models economists use to evaluate policies are quite unclear. How far, for example, should social benefit-cost analysis go to incorporate the politically *feasible* into models that are currently designed to illuminate what is socially *desirable*? The answer is surely different depending on whether the state is an arena for competing interest groups, a rent-seeking actor, or a strong builder with a long time horizon (to use the three basic models proposed by political scientists). But *how* should the nature of the state be included? The answers offered so far by political scientists and economists are primarily descriptive, seeking to explain past policy actions. Sometimes these efforts are remarkably successful, as with

several recent analyses of biases in agricultural pricing. But any normative appraisal of these results remains firmly rooted in standard neoclassical models of Pareto optimality and efficient resource allocation. It is not clear that these models are robust in a complicated world of political economy.

If market failures and government failures are empirical issues that depend on local circumstance, careful analysis that is alert to both types of failure can help government policy makers in all three models of the state to steer a pragmatic path between crashing on either shore. To find this path, analysts have the guidance of history, contemporary comparative experience, and a growing theoretical literature on the political economy of economic development. Certain patterns of success and failure with markets and interventions are quite robust, especially the lesson that displacing markets through direct government actions is far less likely to stimulate rising agricultural productivity and rural growth than strategies that seek to make markets more effective and competitive.

By contrast, some patterns of intervention are widespread despite widely varying circumstances. Protection for producers of agricultural commodities facing declining competitiveness because of rapidly growing industrial sectors is pervasive, despite the hostility of economists to the severe distortions created. Basic political forces, quite possibly with an underlying economic logic that is too subtle for economists to model or measure, must explain such powerful pressures on policy makers in democratic and authoritarian governments alike. Similarly, industrial protection as a stimulus to import substitution discriminates against agriculture in every economy in which it is implemented; so too must very basic mechanisms of general equilibrium force this result in both capitalist and socialist economies. Even without the linkages imposed by functioning factor and product markets, industrial autarky imposes heavy burdens on agriculture and ultimately on the overall process of economic growth.

Perhaps the most powerful lesson from the 1980s is the importance of economic growth to solve what are otherwise considered to be distributional issues. Without rapid economic growth, no economy has been able to sustain an egalitarian distribution of food.

Redistribution *without* growth has powerful and negative incentive effects on the rural economy; the only way to reduce poverty and hunger is to raise labor productivity, employment, and real wages of unskilled labor. As with the general-equilibrium effects of industrial protection, intersectoral linkages across labor markets are sufficiently strong that any uni-sectoral approach to raising employment or wages is doomed to failure. Designers of rural development projects have learned this lesson. Although individual projects might have enough human and financial resources poured into them to serve as "successful" showcases, replication requires a favorable economic and institutional environment.

Such an environment is a fragile thing, however, and short-sighted state interventions are the most common threats to the delicate institutions, investor expectations, and community self-confidence that are essential to the successful spread of rural development projects in market-based economies. There are reasons, of course, for the short time horizon of so many governments, extending to the overarching concerns for political legitimacy, maintenance of power, and seeking opportunities for rents. Concerns for food security, however, especially in urban areas, are often the basis for many myopic actions that have devastating long-run consequences for the development of market institutions. Governments do foolish things in the name of stabilizing food prices, including commandeering food at gunpoint, banning private stockholding, and enacting legal price ceilings without the logistical capacity to make them effective. In the name of maintaining access of the poor to basic staples in the present, such interventions are one of the surest ways to deprive them of that access in the future.

This short time horizon on the part of food planners in developing countries is matched by that of donors. Despite the rhetoric to the contrary, there is little evidence to suggest, for example, that food aid can be used as a reliable source of supplies for planning food security or that food aid resources can be used effectively in agricultural development. Part of the problem is a familiar Catch 22. Only countries with sound food policies and the analytical capacity to program food aid supplies into an efficient food

system can use these resources effectively. But such countries do not "need" food aid by the criteria of most donors. On the other hand, countries in dire need usually have ineffective food policies that impede the development of the agricultural sector. The dumping of food aid supplies in such environments compounds the problems of development.

This limited potential for food aid is surprising, particularly in view of the vast political resources used to defend its funding and the substantial financial and bureaucratic resources needed to administer food aid programs, which have high opportunity costs in both donor and recipient countries. It might be tempting to conclude that food aid has such a poor record because it inherently involves the state in some type of intervention, either directly in markets or indirectly through more targeted distribution programs. Alternatively, far more of the onus might be put on donor governments for their inability to program and deliver supplies with adequate lead time for long-term planning of food security programs or with sufficient flexibility in the short-run to cope with fluctuating needs as domestic supplies fall short.

It is easy to conclude that food aid is irrelevant to the development process. Such a conclusion misses two potential contributions. First, discussions about food aid are often the only effective policy dialogue that donors and countries have about agricultural issues. In a surprising number of countries, food aid negotiations are the only time the countries themselves undertake a careful review of their agricultural and rural development strategies. Food aid does not always lead in this direction, as continuing high levels shipped to Egypt and El Salvador indicate, but the policy potential of food aid negotiations is often quite real.

Second, broader analysis of functional relationships between the state of the world food economy and volumes of food aid actually shipped can highlight important areas where the world economy fails to serve the interests of the poorest countries. The well-documented inverse relationship between world grain prices and food aid supplies runs just counter to the needs of these countries. Better mechanisms are needed to allocate

food aid, especially ones that would be less perverse in relating needs to availability, and to lessen the instability of prices in world markets directly, thus severing the relationship altogether.

Real progress has been made since the world food crisis in the mid-1970s in understanding the role of governments in stimulating or inhibiting agricultural development. Part of that understanding has come by focusing research attention directly on the determinants of government intervention itself. Development economists now have an acute awareness of the role of interest groups, bureaucratic politics, rent-seeking, and nation-building in the adoption of specific policy proposals.

Most of the lessons are neither revolutionary nor even highly controversial. To the rather pragmatic community of development specialists, there are no secrets to success. Agricultural development requires a sustained commitment from governments and the private sector, with reasonably clear ground rules on appropriate roles for each. The balance of roles can be surprisingly varied, or at least so the historical record indicates. But the lessons provide only loose guidelines, and it is useful to speculate on the missing elements in the analysis and the reasons for their absence.

The Dynamic Impact of Investment

Two decades of research and analysis have documented the robust patterns of government intervention in agricultural pricing. Even if economists cannot prevent the distortions, their analysis is more informed and persuasive by knowing why the policies are put in place. And there may even be more economic rationale behind the underlying political motivation, which reflects as much a desire for price stability as it does for pure farmer protection, than existing static models of efficient resource allocation can identify.

But what do we know of historical patterns of investment in the agricultural sector--those on government account and by the private sector, including by farmers themselves? Despite studies of resource flows from rural to urban areas and an entire body of

literature on dual economy models of development, which use agricultural surpluses to finance industrial expansion, the answer remains "shockingly little." There is no study of investment flows to and from agriculture to match the historical and cross-section analyses of pricing biases now available in the literature. Studies of urban bias, a term first used by Lipton only thirteen years ago, suggest there is a significant misallocation of investment funds on public account. And yet no systematic and quantitative assessment has been conducted because the basic data themselves simply do not exist. Even for public expenditures, it is difficult to identify shares that go to agriculture, to rural areas (not the same thing), and to improving the access of urban markets to rural products (where presumably both ends of the market chain will benefit). Not a single country in the Third World has a time series of private investment in agriculture that includes the value of on-farm savings from both financial and sweat equity.

It is no wonder that the profession remains largely ignorant of the determinants of agricultural investment, in sharp contrast to the progress that has been made in understanding pricing policy. This ignorance creates immediate problems for any attempt to model the *dynamic* impact of government interventions on the agricultural sector directly and, by extension, on the growth process. For example, the impact of price changes will be captured only as short-run changes in supply and demand. In the absence of functional information on rural investments, models cannot accurately capture indirect effects on savings in rural households. In particular, investments at the farm level in land productivity, livestock, and tree crops cannot be distinguished from investments in financial savings, human capital, or portfolio diversification in the form of support for an urban migrant. Such functions are impossible to specify in the absence of empirical information on the underlying flows, which is precisely what is missing. Only detailed historical analyses of individual countries, or even provincial and regional experiences, can supply such information. Without this information and the functional relationships that could be derived from it, analysts can be properly skeptical of any models claiming to describe the dynamic impact of government interventions on the agricultural sector.

An Agricultural Trade Strategy

A similar range of problems with respect to missing data and unasked questions troubles the debate over export-led growth, especially for agricultural commodities. The evidence now available is very clear; most countries have systematically discriminated against their agricultural sectors through direct and indirect policy instruments. Part of this discrimination, and indeed a substantial part of urban bias, must stem from deep-seated expectations about adverse movements in the agricultural terms of trade in the face of rapid expansion in production and exports. There is no doubt that the aggregate, short-run price elasticity of demand for most agricultural products is substantially less than one (in absolute terms) and is smaller than the equivalent figure for industrial products. Even if the marginal productivity of investments in agriculture is substantially higher than that in industry, such productivity might sit on a razor edge--even modest increases in agricultural funding would drive its marginal productivity well below the opportunities in industry. It is best, the argument runs, not to expand agricultural output "too fast" (and the price collapse in the mid-1980s reinforces this point of view.)

Such an argument does not explain why so many countries have distorted agricultural incentives so massively, leading to sharp losses in market share for export commodities and to poor growth domestically. Other elements in the political economy of these countries must answer this dilemma. However, these policy failures in some countries, especially in Sub-Saharan Africa, opened market opportunities for other countries, especially in Southeast Asia. Would Malaysia and Indonesia have expanded palm oil exports so rapidly if Nigeria and Zaire had also been aggressively expanding their export volumes? Export-led growth based on the agricultural sector has been successful in only a handful of countries. Is this because there is limited wisdom among countries with respect to growth strategies or because of deeper limitations on the "market" for such strategies?

The dynamics of competition for market share play a key role in the "new international trade theory," which is providing very useful insights into potential welfare

gains to individual countries that practice "trade strategy" instead of free trade. A trade strategy requires government intervention in precisely those economic activities for which the historical record is most dubious--protection of infant industries, subsidies to exporters, and bilateral quota deals. These measures open obvious opportunities for rent seeking and indirect, but powerful, biases against the agricultural sector. Can such trade strategies be used in the future to stimulate agricultural exports and thus contribute to more rapid economic growth? Many are doubtful about the implementation capacity in most developing countries and wary of the clear potential for subverting the theory of public benefits into private gains.

With a global effort to increase agricultural exports, the consistency of price assumptions must also be questioned. Even if diversification of export crops is a technical possibility, the new export pessimism cannot be dismissed. The marketing infrastructure and commercial skills needed to diversify agricultural exports are available in only a handful of middle-income countries; they are especially lacking in just those Sub-Saharan African countries most vulnerable to price declines for their main agricultural exports. For these countries, a more likely prospect is for "immiserizing growth," as prices fall faster than exports expand. Only the development of new markets, possibly in the developing countries themselves, or of sharply greater access to existing markets in the OECD countries, can brighten these prospects.

Unfortunately, both international and domestic pressures are pushing in the opposite direction. The global pressures stem primarily from the debt crisis, as developing countries seek to expand exports and restrict imports. In order to accomplish such an improvement in their trade balance, most developing countries have used a combination of macroeconomic adjustments through exchange rate realignments, more direct controls on imports, and measures to stimulate exports. In the OECD countries, despite much talk of agricultural trade reforms in the context of the Uruguay Round of GATT negotiations, the actual record to date is the opposite. Health concerns over pesticide residues, cyanide in grapes, and hormones in milk and beef, for example, have provided ample excuses to

ban the imports of agricultural products that compete with the output of local growers. This "anti-import bias" for foodstuffs obviously has deep political roots, as the historical record shows. The bias is likely to become stronger rather than weaker. New competitive pressures brought about by a massive shift in export orientation on the part of agricultural producers in developing countries, much of it induced by policy conditions imposed by donors, is likely to change longstanding cost relationships. While the United States, for example, preaches the benefits of competitive exchange rates and export-led growth to its aid-recipient countries, it simultaneously finds its own agricultural exports undercut by foreign price competition and in need of direct subsidies to remain competitive. The schizophrenia and doublespeak required of aid officials, the Departments of Agriculture, Treasury, and State, and most commodity organizations in the United States are testimony to the inherent inconsistencies in a more widespread strategy of export-led growth based on agriculture.

A Strategy for Economic Growth

Even granting that agriculture should be a "lead industry" in the growth strategies of most poor countries, policy makers have been presented with two fundamentally different approaches to implementing such strategies. The primary alternative strategy to growth led by exports of agricultural commodities is "rural development." As practiced by the World Bank and other major donors, a rural development strategy focuses heavily on raising domestic levels of demand by improving incomes of the rural poor. In principle, much of the additional output produced in rural development projects would be consumed locally. A rising spiral of improved productivity would stimulate production, consumption, and the health and welfare of rural populations. World Bank experience, in particular, has demonstrated reasonably satisfactory rates of return on many rural development projects, but the same experience also highlights a number of important problems with the internal consistency and macroeconomic impact of rural development strategies.

The most crucial question is the relationship--analytically, politically, and bureaucratically--between a country's rural development strategy and its agricultural development strategy. Part of the problem is definitional. There has been a tendency in the profession to accept the World Bank's *de facto* definition that rural development *projects* must add up to an integrated rural development *strategy*. There has never been any question about the need for an agricultural development strategy to be articulated and implemented by some voice of government. Whether the appropriate visionary and spokesman is the minister of agriculture, the minister of finance, or the president no doubt depends on circumstances, but investments in infrastructure, research, farmer education and farm incentives all require an appropriate degree of government involvement.

Is rural development a subset of this involvement, a more encompassing strategic concept, or are agricultural and rural development two separate efforts? Which is responsible for coherence and government leadership? Rural development is broader in some dimensions, especially with its overall concern for rural poverty and the health, education, and general welfare of entire rural communities. But the traditional commodity focus of most agricultural development programs also cuts across rural development projects by providing the research and extension base for raising productivity and by fostering a marketing system that is essential to delivering new inputs and finding profitable outlets for increases in output.

These issues are important because of the macroeconomic significance of the rural economy. If only agricultural sector analysis is capable of providing consistent estimates of the impact of macro polices on the sector, and of the sector on the macro economy, agricultural planning must incorporate planning of rural development projects. If, on the other hand, planners are primarily interested in changed levels of poverty and community welfare, rural development strategists must take the lead. Even if administrative integration of rural development activities has been discredited by experience, the issue of strategic integration remains. It is not enough for a few government planners to have

A new orthodoxy of neoclassical policy advice now stresses the efficiency gains from market-directed resource allocations and an outward-oriented trade strategy. "Getting prices right" is usually the central element in this policy advice, and in the new orthodoxy this means free trade. No matter how correct this advice might be for most commodities, for important foodstuffs it is universally ignored. Obviously policy makers are unconvinced that their citizens will be satisfied with a laissez-faire approach to pricing the most important commodity in their market basket--that is, to placing their food security in the hands of impersonal and unstable world markets. In fact, the motive to stabilize food prices extends well beyond the benefits to consumers and includes reducing risks for farmers, encouraging investments and innovation, and helping to stabilize the macro economy. For these reasons, price stabilization to enhance food security is caught in that nebulous world of universal popular acceptance and the widespread skepticism of micro economists about whether the benefits justify the costs.

From the point of view of policy makers and national leaders in developing countries, stabilizing the economic environment, in combination with rising real wages, can be considered an acceptable definition of success for economic policy. But no shortcuts or cheap substitutes can be identified for the policies that create and sustain this combination. Price stabilization requires costly logistical interventions and analytical capacity to manage them; generating higher employment levels for unskilled workers, and thus demand-led increases in their real wages, requires the long-term investments in fiscal discipline, export competitiveness, agricultural infrastructure, and efficient marketing systems that underlay the success stories around the world.

Moving from Policy Analysis to Police Advice

Policy analysis is a feeble tool for moving entire economic systems from their present anti-market, inward-oriented, centrally planned reality toward the more promising end of the spectrum that seems to offer success. But modern economics often makes the