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AGRICULTURAL AND RURAL DEVELOPMENT POLICY IN LATIN AMERICA: NEW DIRECTIONS AND NEW CHALLENGES

by

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I. Neoliberal policy reforms and new directions in agricultural development policy

The purpose of this paper is to analyze and assess recent trends in agricultural development policy in Latin America, to identify and synthesize new policy directions, and to highlight emerging challenges and avenues for policy innovation. The paper begins with an overview of how the general evolution of the Latin American countries toward the adoption of neoliberal economic policies and the retrenchment of the state in the wake of economic reform are impacting the design of policies and the structure of policy making institutions. Part II examines economic and agricultural performance in Latin America during the last 25 years. This section provides a necessary benchmark from which to judge the success or failure of recent policy reforms. Part III analyzes the evolution of agricultural policy in the specific areas of trade, product and factor markets, land reform and land markets, research and extension, and irrigation. Part IV explores emerging trends, issues, and challenges that define current policy debates and impact the structure of policy making institutions, including local responses to globalization, policy differentiation, new approaches to poverty reduction, institutional reform and reconstruction, and the sequencing of reforms. The final section summarizes the main themes of the paper and presents a normative perspective on the future direction of agricultural policy in the region.

1. Washington consensus and agriculture

While economic reforms had been initiated as early as 1973 in Chile and Uruguay, and briefly in 1976 in Argentina, in the other Latin American countries it was the debt crisis of 1982 that triggered a series of reforms that have become the foundation for Latin America's current strategy of economic development. With International Monetary Fund and World Bank assistance, countries burdened with debt service obligations designed austerity programs for their economies that included reductions in central government expenditures (government budget deficits fell from a continental average of 5.5% of GDP in 1988 to 1.8% in 1995), decreases in the growth in money supply, exchange rate devaluations, and wage repression. Structural adjustment loans were tied to economic reforms that included the removal of trade barriers and impediments to foreign investment, financial liberalization, privatization of state enterprises, deregulation, and reforms of the tax system and property rights laws (Williamson, 1995). Inspired by the success of the high growth East Asian countries, the neoliberal, export-oriented approach to development has become, in the after-math of the debt crisis, the dominant paradigm of economic development in the region. As a result, adoption of free market-free trade (FMFT) policies in Latin America has been widespread, with almost all countries in the region conforming, to various extents, to the orthodoxy of the "Washington consensus", even if frequently combined with non-orthodox instruments, particularly in transitory attempts at price controls.

Structural adjustment and the process of adopting FMFT policies are re-defining the relationship between agricultural policy and economic and social policy, and altering the context of the debate surrounding the choice of an agricultural development strategy (Schydlowsky, 1995; Woller, 1994; Sheahan, 1992). For the most part, agricultural policy reforms have occurred in the context of broader economic reforms, and agricultural policy has in most instances been directly dictated by macroeconomic policy, with often little explicit concern for agriculture, rural development, or poverty. The perceived success of FMFT policies in curtailing inflation (which fell from a regional average of 196% in 1991 to 19% in 1995), promoting trade (intra-regional trade doubled in the 1990-94 period and regional exports grew at the average annual rate of 6%), attracting foreign investment, and restoring economic growth has served to entrench the fundamental precepts of the neo-liberal paradigm, causing contemporary agricultural policy debates to center less on whether and where to apply market-oriented prescriptions, and more on how to implement these policies while meeting the economic and social criteria of the sector. As many countries in the region are emerging from the economic crisis, increased attention is being focused on designing and implementing policies that maximize economic efficiency within a market

compatible framework, while pursuing social objectives that consider poverty, inequality, sustainability, and income growth.

In spite of renewed growth, the FMFT reforms have been far from successful. Recoveries remain weak with a continental growth rate in GDP of only 0.8% in 1995 and an expected 3% in 1996, with setbacks in Mexico, Argentina, Peru, and Venezuela. Unemployment remains high in most countries and real wages have failed to rise in spite of recoveries. While the incidence of poverty has fallen where recoveries have occurred, inequality has either failed to decline or increased (Altimir, 1995). Cuts in subsidies and rising prices for public services have reduced the welfare of the middle class. Perception that the benefits of growth are not fairly shared is widespread. Progress in democratic representation is exposing governments to sharp pressures against continuation of the reforms. Popular discontent has taken the form of guerrilla insurgencies in Mexico, Colombia, and Peru, opposition to the presence of technocrats in higher office in the ruling party in Mexico, strong showing of the opposition parties in the presidential elections in Nicaragua, election of populist leaders in Ecuador and Venezuela, and increased symptoms of social breakdown, including urban violence, delinquency, drug trafficking, and corruption of the police and judicial systems. Managing the social backlash to the FMFT reforms, and adjusting the course of these reforms to increase their political sustainability, are currently among the prime concerns of Latin American policy makers and international development agencies. The sustainability of economic recoveries, dependent as they are on foreign direct investment and hence on the perceived investment climate, hinges upon ability of the Latin American governments to manage the political feasibility of the reforms. And this affects the course of agricultural and rural development policies as well.

2. Redefining the role of the state

The move towards freer markets has required governments to surrender control over many of the policy instruments that were used as the pillars of the import substitution industrialization (ISI) strategies that prevailed until the introduction of the reforms, and that served to either tax or compensate the agricultural sector, with a net bias against agriculture (Schiff and Valdés). Examples of policy instruments no longer at the disposal of governments adhering to the FMFT orthodoxy cover the spectrum of public policy. Tariff rates and quantity restrictions on trade have in principle been eliminated or subjected to international regulation under the terms of particular trade agreements. Many countries have moved from fixed, and often multiple, exchange rates to floating or "pegged" rate regimes. In regards to product and factor markets, subsidies, price controls, and quantity restrictions have been eliminated or greatly descaled, with prices and output increasingly market determined. Credit subsidies and special credit programs have been reduced, with interest rates and the composition of borrowers removed from policy discretion. Land markets have been deregulated and agrarian laws changed, freeing the land market to respond to market forces.

In practice, however, governments have had varying degrees of success in surrendering control over these policy instruments. Quantity restrictions have effectively been removed and tariffication has been widespread, including the use of tariff-rate quotas as instruments compatible with elimination of quantity restrictions. However, uneven progress toward freer trade is due to both pressures of farm producers and fiscal interests of governments. In general, the dilemma of agricultural trade liberalization in the early 1990s is that it has occurred in an adverse context of falling international commodity prices, appreciating real exchange rates, high interest rates, and falling subsidies, all of which have combined in creating serious profitability crises for agriculture (Valdés, 1996; Gardner, 1996). This is generating pressures on governments to either restore protection of the import-competing sectors or seek direct income transfers decoupled from price interventions. For governments, trade interventions were sources of economic revenues (export taxes and import tariffs) and political power (discretion over the allocation of exemptions and compensatory subsidies; see Bates, 1981) for policy makers and bureaucrats, and have

economically benefited politically influential vested interest groups who appropriated the compensations through rent seeking activities. As a result, Valdés (1996) observes that the effective rate of protection remains sizably negative on exportables in many countries (Colombia, the Dominican Republic, Ecuador, Paraguay, and Uruguay) while there is protection for the import competing sectors. Progress toward reducing the anti-agriculture bias in price policy has thus been highly uneven across countries and commodities. Most particularly, the anti-agriculture bias of direct price interventions has, except where there are transitory foreign exchange crises as in Mexico, been replaced by indirect taxation as a consequence of appreciation of real exchange rates associated with capital inflows. Indeed, the chronic weakness of domestic savings creates a strong policy dilemma between growth and appreciation as foreign capital inflows must be relied upon as the primary source of investable funds.

To a great extent, agricultural policy reforms in the last decade can be characterized as a process of "rationalization" of sectoral policy with macro policy, i.e., of trimming and canceling government programs and policies in agriculture that could not be justified under the FMFT paradigm. Hence, there has been a paring down, if not the complete elimination, of government functions not satisfying the classical rationalizations for state intervention in a market-oriented system. The role for government is increasingly limited to the promotion and regulation of free and competitive markets, and to the provision of goods and services where markets fail -- as in the cases of public goods, negative externalities, natural monopolies, asymmetric information, economies of scale, and very high start-up costs. In terms of agricultural programs, the public goods character of infrastructure--such as transportation, marketing, and irrigation--and services such as research, extension, and export promotion justify at least partial public provision. Negative externalities call for government intervention in environmental protection and resource management. Asymmetric information may cause markets to fail and may justify a public role in, for instance, the certification of seeds or product quality. Government is also expected to provide the legal institutions to enforce property rights (land titling, patents on technological innovations), enforce anti-trust legislation, and regulate rural financial and crop insurance systems.

With the loss of policy domain over many classical instruments of agricultural policy resulting from market liberalization and the submission of agriculture to macroeconomic policy reforms, the scaling back of government programs through the process of rationalization and privatization, and the downsizing of government intervention due to fiscal austerity measures, the state has played a less active role in agricultural policy during the last decade, both in terms of economic and social objectives. The ascendancy of the market paradigm has caused the role of the state and agricultural policy to be increasingly determined by the needs and limitations of the market system. Beyond its role of facilitating a competitive market system, agricultural policy has been defined negatively by that which the market cannot accomplish either because markets fail or do not exist, or because they produce socially undesirable outcomes. In addition, while macropolicy has been typically proactive (e.g., the promotion of regional trade agreements, greater independence of central banks), agricultural policy has all too often been a passive appendage of macropolicy initiatives, seeking adjustments of sector to macro initiatives as opposed to pursuing proactively specific sectoral policies. Instead of focusing on differentiated complementary microeconomic reforms to promote the competitiveness of the different classes of farm producers, policy reforms have had a tendency to focus on macro-level adjustments and on the design of government interventions to compensate losers in the transition to FMFT policies in order to make the reforms politically feasible.

3. New approaches to agricultural development policy

Despite, or perhaps because of, the retrenchment of the state, there is an emerging consensus on the need for a more active role for the state in redressing the social failings of the market system (UNICEF, UNDP, FAO, CEPAL). This emergence coincides with a growing appreciation that market-oriented economics does not necessarily imply an adherence to laissez-

faire social policy. Free competitive markets, while economically efficient, may be "socially" inefficient, justifying state intervention when markets fail in terms of social criteria. Citizens may express via political systems preferences for an allocation of goods, income, or wealth among the population, or over time, that differ from the market allocation. These social preferences may differ in terms of: 1) poverty and equality--that is, the intra-generational distribution of income or wealth; 2) sustainability--that is, the inter-generational distribution of income or wealth; or 3) economic growth--the market induced growth rate may not equal the socially optimal growth rate. The state, via macro and agricultural policy, can alter market outcomes ex ante or redress outcomes ex post.

While the scope for state intervention is large, the ascendancy of the market orthodoxy has had important implications for the design of development policies that address the main issues of poverty, equality, sustainability, and growth. New market-based policies are distinguished from older approaches to the same social issues by the compatibility of the new policies with the FMFT paradigm. Market-compatible policies alter market outcomes while maintaining, as much as possible, the fundamental market incentives. In other words, these policies attempt to achieve social goals while minimizing price distortions, and respecting constraints dictated by supply and demand, price stability, budgetary balance, and equilibrium in the balance of current accounts.

Some of the defining characteristics of the market-compatible agricultural development programs include: 1) minimal direct government involvement in markets--policies are achieved through economic signals (taxes and subsidies) rather than through government ownership; 2) targeting specific groups for assistance through differentiated interventions; 3) using lump sum transfers as opposed to price policies to minimize market distortions; 4) improving the access to assets, reducing the transactions costs, and raising the productivity of targeted groups (to allow their own initiatives in the context of market forces to raise their incomes); 5) using market transfers of productive assets rather than legislative control (e.g., grants to poor to purchase land rather than imposing size limits on land holdings and tenancy controls); 6) maximizing the use of the private rather than the public sector (e.g., the private provision of publicly funded extension); and 7) decentralizing governance to seek to achieve both efficiency and welfare gains in policy making and government interventions compared to central administration. Some contemporary policy reforms have tried to achieve social objectives such as increasing the productivity of the poor, or raising nutritional levels, while maximizing the use of the private sector (corporate initiatives as well as grassroots, corporatist, and non-governmental organizations), reducing government bureaucracy, and minimizing efficiency losses resulting from economic distortions.

While the methods of approaching social issues are increasingly guided by the market orthodoxy, the extent to which the state should intervene to promote agricultural development remains fundamentally a political issue, determined by the balance of power between groups within countries. The scope and scale of redistributive policies, and the level of social welfare expenditures on rural development are determined through the political process. The political arena is also where intertemporal tradeoffs in the use of natural resources will be resolved, where the immediate needs of the poor for land to farm or graze will be weighed against the preservation of ecosystems for future generations (ECLAC, 1991; Bramble, 1995). Political battles over present versus future consumption will determine expenditures on research and extension, investment in infrastructure, and tax and saving programs.

In recent years, major changes have occurred in the balance of forces from which policy making and implementation emerges, leading to new approaches to agricultural development policy. Most Latin American governments have made significant progress toward greater democratic representation and toward decentralization of governance. Complementary to these changes, civil society has made a quantum jump in the degree of organization, particularly of the historically weaker segments of society. The last decade has witnessed a proliferation of grassroots and non-governmental organizations that have incorporated many of the rural poor, both

as clients of service organizations and as instruments of political representation. As a consequence, new attention has been given to institutional reforms and constituent organizations as a way of improving the allocation of public resources given the diverse needs of an heterogeneous population. Heterogeneity results from highly varied asset endowments and highly varied constraints on performance resulting from differential access to markets, credit, infrastructure, information, and insurance. An heterogeneous population inevitably demands and requires a highly differentiated policy response to the problems of competitiveness, poverty, and sustainability. Decentralization of governance and proliferating social movements have induced governments to be increasingly responsive to the diverse needs of the population, and have increased the ability of the neediest segments of the population to fight within their political framework for greater access to public services by what has become known as demand-driven development.

II. Economic and agricultural performance and the changing policy environment

Latin American agriculture has been exposed to large macroeconomic and sectoral policy shocks. Before we analyze these policies in detail, it is important to assess whether the combination of shocks and reforms has resulted in a stagnant or growing agricultural sector and in stagnant or growing labor productivity in agriculture. Recent analyses of agricultural policy reforms have concluded that reforming agriculture is extremely difficult and that it has rarely been successful, with Chile, Ghana, and New Zealand among the few success stories (Gardner, 1996). Failure for the reforms to result in an improved performance of agriculture has been blamed on (1) unfavorable macroeconomic contexts, particularly overvalued currencies and excessively high real interest rates, and (2) political difficulties of sustaining the reforms, leading to a return to protectionism.

This section provides an overview of macroeconomic and agricultural sector performance for the Latin American and Caribbean region between 1970 and 1994. Our analysis divides the two and a half decades since 1970 into three distinct epochs distinguished, for each country, by macroeconomic performance, and broadly associated with distinct policy regimes:

- *Early growth,* starting in 1970, and lasting for as long as per capita GDPs are rising. It is a period characterized by ISI policies, debt accumulation, and ultimately unsustainable fiscal and trade policies.
- *Recession,* characterized by falling per capita GDPs, and the initiation of stabilization and structural adjustment policies.
- *Late growth*, characterized by economic recovery in per capita GDP growth, with relaxation of stabilization policies (including fiscal austerity and competitive exchange rates) and a deepening of neoliberal policy reforms.

The analysis also focuses on discerning the features of strong economic performance in the late growth period. The countries used in the study were grouped into 2 categories:

- *Rapid late growth*: countries with annual GDP per capita growth rates in the late growth period that were greater than the sample average growth rate (2.75%/year.)
- *Slow late growth*: countries with GDP growth rates in the late growth period that were lower than the sample average growth rate.

The analysis looks for correspondences between economic performance and the macro-economic policy environment (real exchange rates, inflation, government expenditures) and indicators of agricultural sector performance (agricultural value added per capita, agricultural labor productivity, and rural population density). The country-level data are presented in separate tables in the appendix; the aggregate group data are presented in the summary table.

1. Economic performance and policy environment

Table 1 lists the gross domestic product per capita growth rates of 20 Latin America and Caribbean countries from 1970 to 1994.[1] Of the 20 countries, 5 did not fit into the 3-period trichotomy used for our analysis: Brazil[2], Haiti, and Nicaragua did not have a late growth period; Jamaica never suffered a significant recession; and Chile was excluded because it had only a very short (though severe) recessionary period 1981-83, and because its macro-economic policies did not conform to the general three-period classification as it began adopting neoliberal policies early in the early growth period. Figure 1 graphically illustrates the GDP per capita growth rate and the associated periods for each country.

The early growth period terminated for 12 of the 15 countries between 1979 and 1981, corresponding with the debt crisis, a world wide recession, and the onset of structural adjustment policies. GDP growth began again for 12 of the 15 countries between 1985 and 1990. Most rapid growth countries have had a sufficiently strong recovery to achieve positive growth rates since the onset of the recession, that is for periods 2 and 3. The slow growth countries still have not recovered, on average, their pre-recession GDP per capita levels. Despite significant inter-period differences in performance, both groups performed on average almost exactly identically over the whole 24 year period.

Another perspective on past economic performance is derived from an examination of policy-sensitive economic indicators such as the real exchange rate, inflation, and government expenditures. We use the same country and period groupings derived from the GDP per capita growth rates to observe correspondences between economic performance, growth epochs, and policy instruments.

Table 2 indicates the average annual growth rates of the real exchange rates for the three periods for each country and both groups. The real exchange rates of both groups of countries depreciated during the recession period. In contrast during the late period, the average real exchange rate appreciated in the rapid growth countries while it continued to depreciate in the slow growth countries. This result is, however, somewhat deceptive in part because it reflects the policies of the statistical outliers (Peru, Argentina, and Honduras). In fact, in six of the eight slow growth countries, the real exchange rate *appreciated*, indicating that almost all countries in the region (except Honduras) reversed the exchange rate depreciations that had occurred in the recessionary period. The impact of the real exchange rate on imports and exports is shown in figure 2.

Table 3 lists the annual inflation rate for the same periods and groupings. Inflation was higher during the recessionary period than it was in either the early growth or recovery periods. Average inflation for all three groups was relatively low in the late growth period, appearing to indicate that countries have maintained into the final period the fiscal and monetary policies necessary to control inflation. While there is a correlation over time between growth and inflation, there does not appear to be a correlation between performance in any one period and inflation.

The estimated annual growth rate of government expenditures is listed in table 4. The rapid growth countries appear to have pursued significantly tighter fiscal policies during the recessionary period than did the slow growth countries. Government expenditures rebounded vigorously during the recovery period, especially for the rapid growth countries.

In sum, the late growth period can be characterized by appreciating exchange rates, moderate inflation, and rebounding government expenditures. The policy instruments/economic

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[1] Data was only available to 1993 for the 6 countries indicated in the table.

[2] Interestingly, although Brazil has failed to enter a strong recovery, it rapid early growth performance was such that its performance over all three periods (1.61%) is among the best in Latin America.

indicators examined here both affect and reflect economic performance, making it difficult to draw causal relationships between the policies and the performance. High GDP growth rates and low inflation permit a benign expansion of fiscal expenditures. On the other hand, the recent appreciation of exchange rates is more ominous as it portends future devaluations and with inflationary implications, as revealed in the case of Mexico.[3] In terms of the agricultural sector, we would expect much of the positive impact that may have resulted from the increases in government expenditures that were directed to the sector to be counterbalanced by the exchange rate appreciations. In the following section, we use the same country and time groupings to see how agriculture fared in the last two and a half decades.

2. Agricultural performance

Table 5 gives the estimated growth rates of agricultural value added per capita. Agricultural value added is contrasted with GDP for each country in figure 1. For all 3 periods and both groups, the rate of expansion and contraction of agricultural value added per capita was less than for GDP per capita. That is, the agricultural sector expanded more slowly than the economy during the early and late growth periods and contracted less during the recession period. Agricultural performance in the rapid growth countries is notable both for the rapid rate of decline during the recession and its rapid rate of growth in the recent period.

Agricultural value added per capita, while a useful indicator of sectoral performance, should be considered in the context of other agricultural performance indicators. If countries experienced significant rural-urban migration and/or restructuring of the economy (away from agriculture), value added per capita may fall despite a healthy economy and a healthy agricultural sector. To account for economic restructuring, we consider labor productivity in the agricultural sector as a second measure of agricultural performance.

Table 6 shows labor productivity measured by the growth rate of agricultural value added per capita of rural population. The growth in labor productivity was in all cases greater than the per capita agricultural growth rates -- growing faster on average at a rate of 2% per year. So while total output for the sector could barely keep up with the growth in population, labor productivity in the sector was increasing, implying economic restructuring, rural out-migration, and higher *average* rural incomes. Agricultural labor productivity growth rates were comparable to the macroeconomic growth rates (table 1) in the growth periods, but were higher than the macroeconomic growth rates during the recession period. In other words, the average output of labor in agriculture grew during the recession while the average output per worker in the whole economy fell.

Relating growth in agricultural value added to GDP growth in Figure 2 shows that the two are consistently related with an elasticity of the order of 0.6 through all three periods. Hence, a 10% growth rate in GDP is associated to a 6% growth rate in agricultural value added. Thus, agriculture has a slower growth than the overall economy when the economy expands and a slower rate of decline when there is a recession. This is the well known phenomenon of the hysteresis of agriculture in the economic cycle. Only with slow growth in the recovery period did the growth of agriculture exceed that of GDP, with an elasticity of 1.9. What does this say about the performance of agriculture in the context of economic reforms? Two observations. One is that the general context of economic growth is indeed fundamental to agricultural growth. Success of the agricultural reforms has thus been tied to success in restoring overall economic dynamics. However, rapid growth has been associated with rapidly appreciating real exchange rates (an annual rate of -6.8 under rapid growth compared to 0.6 under slow growth. See Table 2), and this contributes to dampen the growth transmission effect on agriculture compared to slower growth. There are some clear growth failures for agriculture in slow growth countries, specifically Mexico,

[3] The December 1994 Mexican devaluation post-dates the data.

Venezuela, and Bolivia. Otherwise, however, successful macroeconomic reforms and the associated reforms in agriculture have been able to restore a modest level of agricultural growth, certainly higher than the growth which agriculture was achieving in these same countries under import substitution industrialization and debt accumulation. The second observation is thus that the reforms have not been without effect, even though performance is still modest. We thus do not find support for the pessimistic assessment of the impact of policy reforms on agriculture espoused by Gardner.

III. The evolution of agricultural policy

In this section we discuss the policy arenas of trade, product and factor markets, rural finance, land reform and land markets, research and extension, and irrigation. For each topic we discuss 1) the recent policy reforms, giving examples of how they have been implemented; 2) the transitional issues surrounding the adoption of the reforms, including obstacles to their adoption and policies used in facilitating the transitions; and 3) the new market compatible policies, including examples of how they are being implemented, how they differ from old approaches to the same problems, and what types of new challenges they raise for policy makers and rural constituencies.

1. Trade

1.1. Policy reforms

Exchange rates. Most Latin American countries have consolidated their exchange rates regimes, ending preferential and multiple exchange rate systems. Countries have also moved from fixed exchange rates to managed crawling peg or floating exchange rate regimes.

As examples, Ecuador had frequent exchange rate policy changes through the 1980's, and in 1988 it converted to a crawling peg system, devalued sharply in 1992, and changed to a floating system in 1992. In Nicaragua, policy reforms began in 1990 with the Chamorro government and included consolidation of exchange rates. The 1989 economic reform policies in Paraguay included unification of exchange rates, and introduction of a managed float system. In Venezuela, the 1989 trade policy reform unified and floated the exchange rate, and discontinued foreign exchange rationing. Not all countries have shifted to market determined exchange rates. Argentina, for example, continues to maintain a fixed exchange rate in part to control domestic inflation.

Tariffs and trade barriers. Many countries have lowered trade barriers either unilaterally or as a response to conditions required by GATT or regional trade agreements. Countries have replaced quantity trade restrictions with tariffs, and tariff regimes have been simplified, with the number of applicable tariffs being reduced. Many countries have adopted a unified tariff system for most goods. Tariff levels have been reduced. Most trade prohibitions have been removed. The removal of food crops subsidies has allowed the removal of export prohibitions. State import and export monopolies have largely ended, with state and parastatal trading organizations being eliminated or privatized.

In 1990, Ecuador began to equalize import tariffs, reducing the variation from 0-338% in 1990 to 13-53% in 1991. In May of 1992, a graduated tariff system was initiated, with tariffs varying from 5-20% depending on the level of value added. ENAC ended its control of imports of basic grains in 1993. FERTISA ended its monopoly control over imports of fertilizer in 1986. Since 1990, Colombia has removed all non-tariff barriers to trade, eliminated its state monopoly over grain imports, and eliminated all export tariffs except for coffee. The maximum import tariff has been reduced from 50% to 20%, and between 1991 and 1992 the average tariff on farm goods

fell from 31% to 15%, while the average tariff on farm inputs fell from 15% to 2%. In Haiti, as part of a move in 1986 to liberalize trade, export tariffs were eliminated and the average import tariff dropped from 40% to 20%. Certain food commodities in Haiti are still subject to import licenses. In Nicaragua, the 1990 policy reform reduced tariff ceilings, and eliminated non-tariff trade barriers. In Peru, policy reforms initiated by the Fujimori government in 1990 eliminated import duty exemptions, and quantity restrictions. The Peruvian tariff system was simplified to include only three rates, 5%, 15%, and 25%, with most goods taxed at 15%. In Venezuela, as part of reforms beginning 1989, quantity restrictions were removed and tariffs reduced and simplified. Maximum tariffs dropped from 135% in 1988, to 10-20% in 1993, with the number of different rates dropping from 41 to 3 during the same period. In 1989, the inputs marketing enterprise, ENCI, lost its import monopoly and was restructured. In Mexico, average tariffs with the United States fell from 27% in 1982 to 10% in 1988 when it joined GATT. With initiation of NAFTA in January 1994, average tariff fell further to 5%, and all tariffs are to be eliminated after a fifteen years transition to free trade.

Regional trade agreements and economic integration. Economic integration and trade liberalization have been promoted in the last decade by a surge of regional trade agreements. These agreements include free trade agreements (NAFTA); customs unions centered around a common external tariff (MERCOSUR, CACM, CARICOM, Andean Group); numerous bilateral trade agreements; and preferential trade agreements (CBI, CARIBCAN, Andean Trade Preference Act).

As a result of these trade agreements and unilateral trade liberalization, barriers to trade have fallen and tariff rates have declined significantly. In the region, national average tariff levels have dropped from 35-60% in the mid to late 1980's to 10-15% in the 1990's (OAS, 1995; Naím, 1994). Common external tariffs among MERCOSUR countries fell from 6-44% in the late 80's to 6-15% in the 90's, and common external tariffs for Andean Group countries fell from over 30% to 14.8% in 1995.

Intraregional trade has grown impressively in the last decade. The total export value in LA countries increased 81% between 1986-92, while trade within the region increased 135% (Naím, 1994). Intra-regional trade among Latin America's 11 largest economies expanded 50% between 1990 and 1994. The last decade has also seen large increases in trade between countries with special trade agreements including Argentina and Brazil, Colombia and Venezuela, and among the NAFTA countries. For instance, isolating the role of NAFTA from other determinants of trade shows that Mexican imports from the U.S. have grown by an additional 4.2% per year as a consequence of the trade agreement (de Janvry and Sadoulet, 1996). For agriculture, Mexican imports from the U.S. increased by 24% in 1994, when GDP per capita was rising in Mexico and the exchange rate was appreciating, when they are predicted to have been stagnant without the agreement. In 1995, under the peso crisis, imports would have fallen by 46% without the agreement instead of the observed 25% decline. NAFTA thus played an important role in helping increase trade in good years and reduce decline in bad years.

1.2. Transitional issues

Political opposition to reform and incomplete trade liberalization. While most countries have made significant progress towards eliminating distortionary trade policies, political resistance to reform has made trade liberalization difficult and incomplete. In Colombia, farmers' organizations have successfully lobbied against trade liberalization, and there remains substantial protection to beef, coffee, and rice producers. In Chile, a deep recession in 1983 and the resulting political pressures caused uniform tariffs to climb to 35% in 1984 before falling back to 11% by 1991. Trade reforms are thus not only difficult to implement, they are also difficult to sustain, and there are strong pressures for a return to greater protection of the import competing sectors. For this reason, membership to regional trade agreements creates an essential commitment device that gives credibility that the trade reforms will not be overturned. Mexico had largely liberalized its trade

with the United States unilaterally before entering NAFTA. However, joining NAFTA served as a commitment device that this trade policy would not be easily overturned by subsequent political regimes. Indeed, the commitment worked as Mexico endured the December 1994 peso crisis without raising taxes on its exports to redistribute some of the rent created by the very large real devaluation from exporters to importers, from producers of tradables to producers of non-tradables, and to reduce welfare losses for consumers of tradables. The cost of upholding trade policy commitments was, however, at a high cost on consumers, particularly of imported foods.

Agriculture is one of the sectors most commonly represented among the exceptions, exclusions, and exemptions in the regional trade agreements. Protections for agriculture include lengthy phase out periods for tariffs, and safeguards to protect against import surges. Evidence of a decline in the export share of raw agricultural commodities suggests that the extra protection agriculture receives may be having a deleterious effect on trade (Lee, 1995).

Graduated tariff systems that are still in place discriminate against agriculture because imported unprocessed products have lower tariffs than processed goods (discrimination is greater if the effective rates of protection are considered). As late as 1993, basic food commodities were banned from export in Ecuador. This policy distorted relative prices and reduced foreign exchange earnings.

Transition policies and transparent subsidies. To ease the transition towards reduced protection and free trade, countries can adopt a policy of direct income transfers. The transfers, written into the budget as explicit expenditures, have advantages over indirect subsidies in that they are more transparent and less distortionary. Explicit transfers must compete politically in the budgetary process with other sectors, and are less likely to remain as entitlements. As part of its commitment to joining NAFTA, Mexico agreed to phase out trade restrictions on maize and beans over a 15 year period. As compensation for declining prices resulting from NAFTA and the removal of guaranteed prices, Mexico initiated a direct income transfer program, PROCAMPO, based on historical land area cultivated in ten major crops rather than on quantity produced or sold. Under this program, historical growers of these crops receive a per hectare transfer for a certain number of years regardless of whether they continue to grow the formerly protected crops. This policy is efficient in that it allows growers to freely switch to new crops where Mexico is acquiring comparative advantages. It is progressive since it allows smallholders who do not market any of their harvest to receive the subsidy payments and it compensates all producers in broad agroecological regions at the same rate per hectare irrespective of historical yields. Low productivity producers, typically smallholders, are thus compensated at the same rate as high productivity producers, typically the larger commercial farmers.

Exchange rate stability and appreciation. The long run success of the agricultural sector in an open economy development strategy depends to a large degree on adequately valued and stable exchange rates. Appreciated exchange rates devalue agricultural products, most of which are tradables. Unstable exchange rates create confusion in price signals. Both appreciation and instability discourage domestic and foreign investment in the sector.

With economic recovery, most countries have experienced significant appreciations in their real exchange rates (Table 2). Appreciation of the real exchange rates caused by domestic inflation and a political inability or unwillingness to devalue the currency penalize the export sector. Mexico's management of its crawling peg system caused the exchange rate to become overvalued under the Salinas administration, contributing to a serious profitability crisis in agriculture and output stagnation. A run on the currency after the 1994 elections led to a dramatic devaluation of the currency, followed by a switch to a floating exchange rate system. While this restored price incentives for agriculture, other factors limit the ability of agriculture to respond, including large institutional gaps (particularly in marketing, research and extension, and rural finance), lack of investment in public goods complementary to private investment, extraordinarily high real interest

rates as an element of restrictive monetary policy to control inflation, and a recurrent drought. In Nicaragua, reliance on a fixed, and then crawling peg exchange rate system to control inflation led to an appreciated exchange rate and non-competitive exports. In Paraguay, exchange rate overvaluation played the most important role in turning NRP and ERP below one for many of its principal crops. In Chile, strong capital inflows toward the other sectors of the economy create a Dutch Disease effect and the appreciated real exchange rate acts as a tax on agricultural exports, forcing producers of export crops to increase productivity to remain competitive on the world market. In the eight Latin American countries which he analyzed, Valdés (1996) observes that the decline in real domestic producer prices in the 1990s was principally due to exchange rate appreciation.

Altogether, these experiences show that the macroeconomic context, particularly the real exchange rate and the real interest rate, are determinant in affecting the success of the reforms in agriculture. Too often, economic liberalization in agriculture has been occurring in a macroeconomic context unfavorable to investment in agriculture, jeopardizing the outcome of the reforms and unleashing political demands for a return to protectionism or, when protection is not longer a policy instrument, to subsidies. Exceptions like Chile, where a margin of productivity gains could be captured, show that reforms can be successful under appreciated exchange rates. However, the overarching conclusion is that successful policy reforms in agriculture require, as a precondition, careful management of the macro economic context, most particularly the real exchange rate and real interest rates.

Trade diversion. In theory, regional trade agreements may divert trade from low-cost countries outside of the trade pact to high-cost pact members. However, evidence suggests that trade diversion has not been significant in the Latin American context, in large part because of low differentials between tariff rates for member and non-member countries (Lee, 1995).

1.3. New market compatible policies

Export promotion. The high fixed start up costs and risks associated with certain export markets provide an economic rationale for government export promotion--especially during the initial stages of export-led growth, as countries open themselves to foreign trade. Export enhancing programs should be targeted at new products, have a limited time horizon, and be moderate in scale (ECLAC, 1994).

Economies of scale in the provision of certain services, and the public good nature of certain types of trade information provide other justifications for a government role in export promotion. Governments can provide information about foreign markets including legal requirements, procedures, and international standards. The government can certify products, assist in the promotion and marketing of products, construct shipping and packaging infrastructure, and provide export financing and insurance. Export promotion schemes have been widespread in Latin America. Chile had an effective program through Pro-Chile. Guatemala promoted exports of non-traditional crops such as broccoli and snow peas, often produced by very smallholders, through private organizations and trade associations, such as the Association of Exporters of Non-Traditional Products (GEXPRONT).

2. Agricultural product and factor markets

2.1. Policy reforms

Product markets. Policies designed to liberalize product markets include the elimination of state marketing boards and ending government involvement in the procurement and distribution of crops. Guaranteed price schemes and producer price controls are being replaced by variable tariff or levy schemes. Many consumer price controls have been removed.

In Colombia, state marketing boards were scaled back dramatically after 1990, and procurement by IDEMA has been limited to very poor areas. In 1993, Ecuador introduced a price band system for major commodities to dampen swings in international commodity prices. Similar to the Chilean system for wheat and sugar, a variable levy is applied if the import price falls below a certain level. Since 1989, Mexico has eliminated guaranteed prices and involvement of the national food marketing board (CONASUPO) for all crops except corn and beans. Domestic trade in Nicaragua was liberalized after 1990 through the elimination of price controls and privatization of state managed trading activities. In Paraguay, most direct price interventions in agricultural markets were eliminated in 1989. The Peruvian reforms since 1991 removed consumer price controls, and liquidated the food marketing enterprise, ECASA. The guaranteed producer price mechanism was replaced by a price floor mechanism implemented through import surcharges. Venezuelan reforms between 1989 and 1991 reduced the number of products subject to the maximum retail price control, and most products were taken out of the minimum producer price regime.

Factor markets. Liberalization of factor markets included reduction and elimination of subsidies and the privatization of parastatals involved in input markets.

In Colombia, price controls on inputs were removed after 1990, and the rural development bank Caja Agraria stopped its involvement in input distribution. Law 07 of 1991 introduced a price band policy for eight "sensitive" commodities. In Ecuador, government input monopolies such as EMSEMILLA, FERTISA, and PONAMEC were privatized or descaled. Mexico privatized the state fertilizer distribution monopoly, FERTIMEX, and ended fertilizer subsidies by 1989. Venezuelan reforms between 1989 and 1991 eliminated corn meal and animal feed subsidies. Subsidies to fertilizer were reduced from 90% of value to 50% in 1992, and were eliminated in 1993.

2.2. Transitional issues

Commodity and input price volatility. Increased reliance on international markets may raise domestic price volatility for products and factors. Price volatility is exacerbated by inconsistent exchange rate policies and poorly managed price stabilization programs. Price control systems are likely to induce rent seeking behavior.

The World Bank estimates that Ecuador's price stabilization policies via ENAC actually resulted in inter-year variability that was 10 times world price variability. It shows that, in the context of declining world commodity prices, Colombia's price band merely served to keep domestic prices high. The World Bank argues that a better policy is to use "safeguards" which are additional tariffs that are applied to existing tariffs to stabilize domestic prices. For Peru, the World Bank showed that the efficiency costs of the price stabilization scheme outweighed its benefits, and that Peru should modify its price floor mechanism to 1) include only primary food commodities, 2) incorporate a true price band, and 3) levy a flat tariff on products subsidized by other countries. In Ecuador, a high reliance in imported inputs (domestically produced inputs account for only 18% input use) and a fluctuating exchange rate policy led to highly volatile input prices.

Profitability crisis. Elimination of subsidies and trade liberalization in a context of appreciated real exchange rates, falling international commodity prices, and high interest rates has often created a serious profitability crisis in agriculture. In addition, the descaling of parastatals supplying factors has created an institutional vacuum in support of agriculture, particularly for the middle sectors of farmers who are not serviced by private agents. In Mexico, the profitability crisis of agriculture before December 1994 had led to large scale defaults on outstanding loans and to protest movements (El Barzón) of commercial farmers demanding debt forgiveness. More generally, the

profitability crisis of agriculture and institutional gaps have prevented agriculture from responding vigorously to the agricultural reforms, postponing potential efficiency gains induced by the reforms until price incentives and supportive institutions are back into place. After December 1994, with price incentives restored by a 62% real devaluation of the peso, the profitability crisis has been overcome. The sector's elasticity of supply response remains, however, very low due to institutional gaps, high interest rates, low foreign direct investment, and continuing drought in the North-Central states, postponing again response to the reform.

2.3. New market compatible policies

Price stabilization policies. A well-managed safeguard or price band system may effectively reduce commodity and input price volatility. These policies are designed to create minimal market distortions and to be self-financing. An example of a safeguard policy is the price band system employed by the Andean group countries and Chile to protect domestic basic grains and oilseeds through a tariff surcharge above the basic 11% level whenever prices fall below a moving average of international prices. The Chilean price band system has successfully minimized rent-seeking behavior by insulating price levels from policy manipulation.

Price policies and poverty alleviation. Product price policies are relatively inefficient and blunt instruments to use to target the poor. Large commercial farmers tend to benefit disproportionately from most price subsidy schemes. In Peru, for instance, Javier Escobal (1996) calculates that the combination of exchange rate distortions, price subsidies, credit subsidies, and inputs subsidies resulted in an annual tax of US$331 million on small farmers and a subsidy of US$1,063 million for large farmers. There are, of course, indirect benefits for small farmers from these subsidies to large farmers via employment creation, but these are certainly highly inefficient policy instruments for employment creation. New approaches to poverty reduction increasingly target the poor via labor intensive public works projects and safety net programs such as targeted nutritional assistance programs, rather than by using price policies. Income support to small farmers can more effectively be achieved via decoupled instruments such as PROCAMPO's direct income transfers in Mexico.

Food price subsidies distort markets creating inefficiencies (Calegar and Schuh, 1988). Explicit or implicit food subsidies maintained through artificially low consumer prices or an overvalued exchange rate may have deleterious effects on agricultural and economic growth (Pinstrup-Andersen, 1988). Food subsidies through the price system tend to benefit the rich more than the poor in absolute terms (Alderman, 1986). In the context of the economic reforms, untargeted food subsidies through the price system have been largely canceled and replaced by targeted food subsidies. This raises the issues of differentiated interventions and targeting that will be addressed in Part IV of this report.

3. Rural Financial Markets

3.1. Policy reforms

The principal reforms to the rural credit markets have involved the descaling, elimination, or privatization of the public rural development banks that had been the principal conduit of highly costly and regressive subsidies to agriculture before the reforms. Subsidies for rural credit have been reduced or eliminated as have interest rate controls on private sector rural credit and forced allocations of credit to agriculture. Governments have also reduced their roles in the provision of insurance for use as collateral for loans.

In Colombia, reform of the rural financial sector between 1990-94 raised real interest rates to near market levels, and restructured and recapitalized the rural development bank, the Caja

Agraria. In Ecuador, subsidies to the Banco Nacional de Fomento were lowered beginning in 1991, and interest rate ceilings on deposit accounts were removed in 1993. Haiti closed its national bank for agricultural and industrial development, BNDAI, in 1989. In Mexico, rural finance reform beginning in 1989 streamlined and downsized the rural development bank. Banrural closed 300 of its 500 branches, reducing staff from 22,000 in 1988 to 10,000 in 1992. Banrural was allowed to diversify its loan portfolio to non-agricultural sectors. Interest rate subsidies were reduced, leading to positive real interest rates. Government transfers to development banks were decreased and agricultural credit declined from 22% of all credit in 1983 to 8% in 1992. Small farmers with bad debts have been turned over to the public welfare program, Pronasol. Agricultural insurance was restructured with reduced total subsidization. In Nicaragua, the Banco Nacional de Desarrollo raised real interest rates significantly beginning in 1992. In Peru, preferential interest rates to agriculture were eliminated and banks free to set interest rates. The Agrarian Bank, BAP, was declared bankrupt in 1992. A new second-tier institution, BFN, was set-up to lend to small businessmen and farmers. Reform in Venezuela beginning in 1989 raised the low ceilings on private sector interest rates for agricultural loans. However, ceilings continued to keep agricultural loans rates below rates for non-agricultural loans.

3.2. Transitional issues

Political obstacles to reforms. Many governments experienced strong political pressures to continue policies of lenient loan recuperation and rescheduling, and to maintain subsidized interest rates. In Colombia, Law 34 of 1993 refinanced loans to farmers affected by the crisis of 1992. This policy may discourage loan repayments in the future. Also in Colombia, Law 101 of 1993 capped interest rates and mandated subsidized credit to agriculture. Mexico experienced widespread protests from farmers when the government curtailed the bloated Banrural credit program in the early 1990's. The issue of restructuration of bad debts for many farmers with commercial banks remains an open policy issue that currently limits the ability of agriculture to modernize and diversify in response to the new system of price incentives created by exchange rate depreciation and trade liberalization.

Property titling institutions. In many countries, the process of titling of property was streamlined in order to lower borrower transactions costs. Existing titling programs are being expanded beyond land to include other durable goods and equipment. Titling programs are fundamental for the penetration of commercial banks in agriculture and to give access to smallholders to these sources of finance using land and other assets as collateral.

3.3. New market compatible policies

Collateral and access to credit. In general, the financial market reforms have had a strongly negative impact on the access of smallholders to credit. Many smallholders who could have borrowed from the development banks are unable to meet the more stringent collateral requirements of commercial banks. While titling programs will help, this will not solve the problem of many of the rural poor who have little collateral to pledge. The challenge thus remains to find market based solutions to the problem of access to credit by smallholders who lack collateral assets. Many institutional innovations have been introduced in recent years to solve this problem, both by the public and private sectors.

There are a number of institutional solutions to the reconstruction of a rural financial system with the potential of giving access to smallholders, both those who were previously served by rural development banks, and those who were always marginalized from access to credit. In Mexico, Pronasol's *Crédito a la Palabra Campesina* is a public program that provides small loans with no interest charge to small scale producers who have outstanding bad debts and consequently do not qualify for loans from Banrural or commercial banks. No collateral was required for the loans, but borrowers lose their right to future loans if they default. The program suffers from low

recuperation rates and is therefore far from self-sustainable. The Mexican government is currently adjusting the law on financial institutions to favor diffusion of credit unions, but this is still an incipient system in the rural areas.

In Guatemala, financial NGOs (Genesis and Fundap) are following the model of Acción Internacional to mediate the relationship between organized credit groups and commercial banks. Credit groups are self-formed and all members are jointly liable to repay the loan received by each member. Since members have privileged access to information about the other members (which the commercial bank does not have) they can avoid adverse selection (incorporation in the group of risky members) and moral hazards (members refusing to pay when they can or placing false claims for mutual insurance by other group members) by group members. The NGO adds a 7 points service margin to the interest rate charged by the bank. Repayment rates have been exceptionally high, at least among merchants and microentrepreneurs. Group lending is more problematic for smallholders due to the high covariation of risks, unless they engage in highly profitable activities and associate in groups with diversified activities.

In Peru, many NGOs have entered the field of lending to organized groups, with an iron discipline for repayment since not only are groups jointly liable for repayment, but also the community is made liable for all groups. Due to the exceptionally high interest rates charged by commercial banks, loanable funds are obtained through concessional loans from international development agencies or grants from international donors. While the system performs well in terms of repayment, its expansion is severely confined by access to loans from donor agencies.

There are a number of unresolved issues regarding the reconstruction of financial services for agriculture following the collapse or the restructuring of rural development banks.

- One is the problem of graduation of households from schemes of access to credit without collateral such as Pronasol or financial NGO loans to solidarity groups. If these households have accumulated enough assets under group lending, these assets can serve as collateral for individual loans from commercial banks. For many, this will not be sufficient. Credit records could be made available to commercial banks to facilitate individual access to credit on the basis of weak physical collateral compensated by strong reputational capital. Most schemes have no explicit graduation strategy, often because it is not in the interest of the NGO to lose its best performing customers to commercial banks.

- Another issue is the role of decentralized commercial banks at the level of village branches versus financial NGOs. The latter may be seen as transitory institutions to be displaced by village branches once the formal system of financial intermediation has been reconstructed. In this case, financial NGOs would only continue to play a role with the more marginal and least organized potential borrowers. Village branches of commercial banks can access local information about borrowers by using village agents and giving them adequate incentive contracts to truthfully reveal this information (Fuentes, 1995).

- A third issue is the potential reorganization of the rural development banks. In Mexico, Banrural, after having shed its non-performing customers, has continued to lend under strict performance criteria. These banks could absorb the lending technology developed by financial NGO and extend their clienteles to smallholders, potentially through subcontracting the services of financial NGOs. Innovative institutional solutions linking formal development and commercial banks, with the advantage of diversified loan portfolios and access to broad financial markets, to local institutions and agents with informational advantages are still largely to be developed. Many interesting experiments are in progress to achieve this goal and they are worth monitoring carefully. Indeed, one of the main policy implications of the theory of imperfect and asymmetrical information derived from the new institutional economics is the advantage of linking modern with local/traditional institutions to cumulate gains in risk reduction and market integration (afforded by

the former) with gains in information (afforded by the latter) to reduce adverse selection and moral hazard problems in financial transactions.

Credit as a poverty alleviation tool. Credit access programs will only be effective for the credit "constrained"--those with access to productive investment opportunities who are unable to pursue these opportunities for lack of financial resources. Lack of access to credit does not imply an unmet credit need. Hence, it is often more efficient to provide assistance to marginal producers via targeted public assistance programs rather than via credit. NGOs can have an important role to play in assisting marginal producers formulate potentially profitable new projects. Once this has been done, the challenge remains for the lending institutions to recognize the entrepreneurial poor with no collateral to offer, in terms of their ability and willingness to repay, and to define a lending technology that is mutually advantageous.

Lender transactions costs and access to credit. Lender transactions costs create an incentive for banks to minimize the number of loans they make, thereby discouraging them from making small loans. To encourage commercial banks to loan to smallholders, governments can provide fixed transaction cost subsidies to small rural loans. The World Bank has supported such an initiative in Mexico. This type of subsidy is preferable to an interest rate subsidy as it encourages the bank to contract with smallholders and does not distort the capital intensity of projects. Ideally, transactions costs subsidies should be accompanied by technical assistance for the definition of projects and the management of loans, as is effectively done by FIRA in Mexico.

Development of private rural financial institutions. There is a need for government regulation and supervision of commercial banks, credit unions, and credit cooperative to enhance consumer confidence in these institutions, particularly if they are to mobilize rural savings. There is also a need to provide technical assistance and training to new RFI's, especially small scale credit unions and credit cooperatives. Definition of a regulatory framework to codify the initiatives of financial NGOs as well as the provision of financial services by RFIs are still also largely to be defined and require urgent policy attention.

Savings mobilization and sustainability. The removal of caps on deposit interest rate and deregulation of the commercial bank sector should encourage savings mobilization, which is crucial for the long term sustainability of RFI's. Privatization of the social security system, as was done in Chile, is an effective way of mobilizing savings for the private sector. Other countries in Latin America such as Bolivia are emulating the Chilean example, and many other countries are pondering shifting their welfare system from a pay-as-you-go to a capitalization scheme. In Mexico, commercial banks are opening windows on both sides of the U.S. border to assist in the transfer of remittances and channel deposits toward potential investors in the emitting communities, thus helping use remittances for local employment creation, and the eventual reduction of future migration flows.

4. Land reform and land markets

4.1. Policy reforms

The general direction of the reforms that codify access to land has been to end or greatly restrict the old systems of state-managed land confiscation and redistribution. Limits placed on the size of land ownership have been relaxed or removed. Communal or state owned agricultural land are frequently being distributed to the users of the land. There have also been dramatic changes in laws governing land markets. New laws have been passed permitting the sale, rental, and sharecropping of all land. Laws have been changed to permit foreign and corporate leasing and ownership of land. There have also been land titling initiatives to encourage land registration. New laws permit the use of land as collateral in credit transactions.

In Colombia, the state land reform agency, INCORA, was phased out of its role in purchasing and redistributing land. In Mexico, the 1992 reform of Article 27 of the Constitution and the new Agrarian Reform Law put an end to fifty years of redistributive and restitutive land reform. By contrast, the "reform of the reform" allows to title individually, sell, and rent land formerly owned by the ejido, allows foreign corporations to own and lease land, and increased the permissible landholding limit (Randall, 1996). A land titling program, PROCEDE, was created to assign certification titles (preliminary titles) to the ejidatarios in ejidos that request this procedure. By July 1996, 25% of the ejidos had completed this process, 40% were in progress, and 35% had not initiated procedures. However, only 258 of a total of 29,135 ejidos had demanded that these certification titles be transformed into private property titles allowing the unrestricted sale of land. This lack of progress toward final titling was due to a variety of causes, including ejidatarios' fear of abuse by powerful caciques in final titling, desire to preserve the agrarian community intact with the advantages it confers in compensating for market failures for labor and insurance, interest in maintaining the privileged attention by government which the ejido has historically enjoyed, fear that a land tax would be imposed upon privatization, lack of perceived benefits in areas where the land has only marginal economic value, and disinformation by entrenched old-style ejido leaders. In Peru, the Agricultural Investment Promotion Law of 1991 liberalized the sale and lease of land to individuals and corporations regardless of nationality. The law raised the maximum land holding limit and permits sugar cooperatives to restructure into corporations. In Chile, where land ownership had been capped under the Frei and Allende governments to 80 hectares of basic irrigated land, limitations on land ownership have now been eliminated and lands in the former land reform sector have been privatized.

4.2. Transitional issues

Over-valued land. In many countries, land values have been inflated by policies that encourage investment in land for non-agricultural reasons. The price of land may exceed the capitalized value of future agricultural profits if the land is being used as a hedge against inflation, as an asset that can be liquidated to smooth consumption in the face of risk, as collateral for access to loans, as a tax shelter, or as a means of laundering illicit funds. In Chile, land was used as a hedge against inflation before the advent of indexed savings systems and developed capital markets. Distortionary policy interventions in credit, factor, or product markets, as well as biased access to public services such as information and technology, that inflate agricultural profits will also inflate land values. If these distortions create differential benefits, particularly associated with scale, inflated land values prevent those who do not benefit from the distortions to bid for land on land markets, the landless and smallholders in particular. Getting land markets to work for the landless and smallholders thus requires eliminating policy distortions that create benefits that cannot accrue to them.

Tenancy laws and deforestation. Economic conditions and population pressures in some countries have led to the rapid expansion of crop and livestock frontiers with concomitant environmental degradation and deforestation. Some countries have land tenancy laws that encourage excessive deforestation and land clearing. For example, in Ecuador the Law on Unused Lands requires, for maintenance of ownership, that at least 50% of the land be cleared, that cleared land be cultivated for five years, and then that the other 50% be cleared. Similarly, the Law on Colonization requires settlers to clear eighty percent of the land or risk repossession. Lack of secure property rights discourages long term investment in land and forests.

Land registration and titling. In many countries, particularly in the Caribbean, a high share of smallholders do not have formal titles to their land. This creates uncertainties regarding continuous access to land that discourage long term investment and induces mining of the land. It also prevents these producers from using the land as a collateral for loans. While several countries accompanied changes in land legislation with land titling programs, others continue to have land

registration and land titling projects that discourage the use of formal land markets. This is because transactions costs associated with obtaining a title are often too high, creating a need to simplify and streamline registration procedures. This is the case with the PROCEDE program in Mexico where procedures may well be too costly and complex for the poorer, more isolated, and indigenous ejidos (World Bank, Mexico Agricultural Memorandum, 1995). Individual titling is, however, not always the best answer for a more efficient use of the land. When risks are high and there are significant market failures for credit and insurance (like in ranching) or when there are economies of scale (like in forestry), common property resources, if communities are able to cooperate in the management of these resources to avoid overuse, may be a more effective form of property rights than individual titles. In this case titling can be collective. This is the option that has been chosen for the common property resources in the Mexican ejido which will remain community property while individual plots are privatized. It, however, raises serious questions about who in the community will have access rights to these lands and what complementary programs should be put into place to induce communities to develop the necessary cooperative behavior which, for the moment, is more often missing than not.

4.3. New market compatible policies

Land distribution. Liberalizing the land market will most likely lead to a concentration of land assets. There is, for instance, evidence of worsening land distribution in Paraguay as a consequence of the operation of land markets. In the presence of market imperfections, especially in the credit market, land could become concentrated in the hands of producers who are not necessarily the most efficient, even from a private standpoint. For example, smallholders may be unable to purchase land because they lack access to long term credit, even though they are more efficient producers because an inverse relation between total factor productivity and farm size exists. In this case, this should induce a dual process of concentration of land ownership in the hands of those with advantages in accessing capital and of atomization of operational units through tenancy contracts with peasant households who have an advantage in accessing cheap family labor.

The challenge exists to either 1) remove the distortions that create disadvantages for smallholders and thus make land markets work for them, or 2) design institutions and projects that provide access to land for smallholders inspite of market distortions. Making land markets work for smallholders requires existence of a set of complementary market and institutions that insure their competitiveness and give them access to long term financing for buying land. Importantly, this suggests that there is a sequencing in agricultural reforms, where institutional reforms must be completed before the land market is liberalized so that institutional biases against the competitiveness of smallholders are removed before competition for access to land is opened to all. In 1994, Colombia initiated a grant and loan program for the redistribution of land. Law 160 provides to landless peasants grants of up to 70% of the price of a family farm, and credit for the remaining 30%. In Mexico, the land reform will only succeed in creating a successful smallholder sector if the complementary reforms to insure their competitiveness are in place by the time the land market is activated. Otherwise, the land market will help expedite the process of reduction of farm population and elimination of the middle sector. Whether the rural development efforts initiated by the ministry of agriculture will prove sufficient for this purpose remains to be seen (see de Janvry et al., 1995). In general, given the highly diversified sources of income that characterize Mexican farm households, a successful approach to rural development requires going beyond agriculture and thus calling on a broad array of participatory institutions, a process that is still absent in Mexico.

Liberalizing land markets is not sufficient to assist the landless and smallholders gain access to land. To help them, several countries have initiated land banks (bancos hipocaterios, Fondo de Tierras in Guatemala) where the government accumulates land from the public domain, by legal confiscation of illegally appropriated lands (e.g., by recognized druglords in Colombia), state purchases of lands on the open market using public funds and by contracting special loans

from international lending institutions, use of lands donated to the program by foreign governments and organizations, and expropriation in cases permitted by the Constitution. In other instances, land transactions between large and small farmers have been managed by NGOs. This is the case of the Penny Foundation and the Fondo Ecuatoriano Populorum Progressio in Ecuador (Navarro, Vallejo, and Villaverde, 1996). In all cases, the determinants of success of these schemes are (1) the price at which land can be acquired from large farmers and (2) the cost of long term credit for buyers. The first is tricky when there are capital market distortions and public goods biases favoring large farmers and if land reform interventions in the land market put upward on the price of land. The second is usually costly given the high interest rates that currently prevail in Latin America, requiring an element of donation to beneficiaries. Land market-based land reforms are for this reason still in an experimental phase that will need close monitoring to establish conditions for success.

Land rental markets have in general been badly suppressed under the Latin American land reform initiatives as they were considered exploitative of peasant households, particularly sharecropping and rent in labor services arrangements that were once widespread throughout the continent. The new institutional economics has contributed to restoring at least the efficiency value of these contracts in a context of market failures. Sharecropping is a risk sharing device that may induce greater efficiency in resource use when insurance markets fail and both landlord and tenant are risk averse. When other markets such as for labor supervision and farm management also fail, sharecropping may be superior in efficiency to both wage labor contracts and fixed land rental contracts (Eswaran and Kotwal, 1985). Land rentals transactions may go from peasants to agroindustries, as in Peru and Mexico, when the latter have superior access to markets, and working adults in these peasant households may find themselves hired as wage workers on their own farms, cashing both a wage and a rent. When there is an inverse relation between total factor productivity and farm size due to the ability of smallholders to overcome moral hazards in labor efforts, it is in the best interest of large landholders to break their farms into small tenures, a practice that is typical of Asian agrarian relations. And for young tenants, when capital markets fail to deliver access to long term credit, future access to land may be achieved through an "agricultural ladder" where capital accumulation under rental arrangements eventually allows the subsequent purchase of land. Land rental contracts are thus locally efficient (i.e., from the standpoint of the landlord), even though equity implications depend on the relative bargaining power of the two parties. From a policy standpoint, making land rental markets more competitive and increasing the bargaining power of tenants are effective ways of reconciling the efficiency and equity gains that such markets can offer.

5. Research and Extension

5.1. Policies reforms

Most countries in Latin America have reduced public expenditures on research and extension due to fiscal constraints. At the same time, there has been a move towards descaling, decentralizing, and privatizing research facilities and extension services.

In Colombia, research is divided between ICA (a government agency) which focuses on staples and producers' organizations (*gremios*) which focus each on a particular crop. About 60% of all funding comes from ICA and the rest is private. Public expenditures on research fell by 51% in real terms between 1988 and 1994. In 1992, ICA was divided into two entities, an administrative body funded by the government and a research body that is jointly public and private. Extension has been decentralized from ICA to municipal governments. In Ecuador, the national research institute, INIAP, has had declining budgets over the last 15 years. The funding of agricultural research is being channeled through a foundation that receives both public and private funds. In Peru, public research and extension staff were cut back dramatically. Five

research stations were converted to private foundations composed of associations of agricultural producers, exporters, extension agents, and NGO's. The salaries of public research and extension staff hired by these foundations are to be funded by government.

In Mexico, fiscal expenditures on agricultural research have declined from 0.46% to 0.27% of agricultural GDP. Parastatal assets were transferred to producers' organizations, including the Mexican Coffee Institute, the Institute for Sugar Cane Improvement, the National Cocoa Development Council, and the National Fruit Company, as well as to ejidos (Fertimex warehouses). Subsidies to the National Seed Production Company (PRONASE) have been reduced and it has been placed on a competitive basis with private firms. Seed prices are no longer controlled. The 1991 Seed Law gives seed companies access to government research products. Reform of extension services in 1985 included: 1) reorganized and decentralized administrative districts; 2) increased cost-sharing; and 3) a shift in focus away from basic grains. Reduced funding and increased non-extension duties for extension agents has led to a de facto privatization. Access to technical assistance for the ejido sector basically vanished under these reforms, seriously compromising the ability of ejidatarios to adapt to the new scheme of price incentives by modernizing and diversifying their crops (de Janvry, Gordillo, and Sadoulet, 1996).

5.2. Transitional issues

Public private balance. Recent policies have promoted privatization and reduced government involvement in the provision of research and extension. These policies have been promoted because of fiscal austerity under adjustment and the observation that government services tend to be inefficient and bureaucratic, and lacking in innovation. An important current issue is to define the appropriate roles of the public and private sectors in the provision of agricultural research and extension. Emerging questions are: to what extent can public agencies be made more efficient by subcontracting services out to private companies? To what extent are agricultural technology and extension services public or private goods? To what extent can the government use economic signals (taxes and subsidies) rather than ownership to overcome market failures? An important determinant of the role of the private sector in biological research is introduction of new legislation regarding patent rights for biological innovations. Increasingly, under appropriate legal protection, biotechnology research is being done by multinational corporations as opposed to the traditional genetic research that produced the Green Revolution where public research systems had an important role to play.

5.3. New market compatible policies

Market failures. Market failures create important roles for the government in the provision of research and extension. Market failures arise in the case of research and extension because of strong positive externalities, moral hazards, and economies of scale. For example, investments into self-pollinating crops such as rice and wheat cannot be privately recuperated due to the non-excludable nature of this research. Vaccines and seed quality are two examples where markets could fail due to the moral hazards that would prevail without regulation and quality control. Private firms may find it unprofitable to provide extension services in remote areas, yet this may be deemed desirable for social reasons. In addition, there are important external effects in extension through the demonstration effects that early adopters create on others. Another rationale for state funded research is the infant industry argument: high start-up costs and high risks discourage or prevent private investment. Finally, it may be preferable for the government to operate in situations where economies of scale would lead to a natural monopoly. These market failures in general cannot be eliminated by perfecting markets, and calling on public and private institutional innovations to mitigate the impact of these market failures on research and extension.

Focus of public research resources. Reforms have changed the role of governments in research from having direct involvement at every level of research via a centralized bureaucracy, to having a

more managerial role. In this emerging arrangement, the direction and focus of research is guided by a competitive allocation of research funds. A pressing question is: how should governments allocate these research funds? A general principle is that funds should be allocated toward crops where private research is not forthcoming, i.e., toward crops for which producer groups are not able to garner adequate resources. Producers' organizations tend to be weak in traditional staple crops such as cassava, potatoes, etc. A second criterion would be to focus on crops which the country is importing or exporting, as supply increases in these crops will have a lower producer price effect, allowing more of the gains from technological change to be directly captured by producers.

Research should also be focused on non-labor displacing technologies and crops, that is towards cropping patterns and technologies that take into account the effective relative prices of labor and capital in the local economy. Effective prices measure the prices paid and received by farmers who face idiosyncratic transactions costs in relating to markets (Sadoulet and de Janvry, Chapter 9, 1995). In general, public funds should be used to promote technologies that raise the levels of land and labor use intensity so as to capitalize on the comparative advantage of smallholders (effective market prices) and of the nation as a whole (effective shadow prices). Research that raises the profitability of crops per unit of land can help stem off-farm migration. The equity criterion would focus research funds on crops cultivated by poorer producers in farming systems that characterize their access to cheap labor, high levels of risk aversion, and often high transactions costs in accessing to markets.

Transactions costs and access to extension services. Analogously to banks, private providers of extension assistance will be discouraged from selling services to smallholders unless they can be compensated for the additional transactions costs they will incur. There consequently is a role for government in facilitating and encouraging the formation of producers' organizations that can meet with extension agents as groups, thereby lowering transactions costs for the extension providers. An alternative solution would be to provide subsidies based on the number of households the extension agencies work with. These subsidies can be on a declining basis as producers learn to value the services of the extension agent and learn to cooperate in using these services. To induce competition among providers of extension services and control moral hazards in delivery, funds can be allocated to smallholders as vouchers that can be freely used to demand the desired services, as effectively done by INDAP in Chile. The approach is, however, not free from difficulties. Private extensionists have little accountability in the quality of the services delivered and they can easily collude with clients to share the subsidized fees instead of delivering socially beneficial services. Needed is to design incentive contracts whereby private extensionists share in the benefits of the results derived from the advice they provide. Also needed is to promote users' organizations that can assume the role of monitoring the quality of the services delivered by private extensionists (Cox, Niño de Zepeda, and Rojas, 1990).

Contract farming. Contract farming represents a potentially efficient way of transferring information and technology to growers. Agro-industrial firms can provide, via contracts, the credit, inputs, technical assistance, and information smallholders need to cultivate and market lucrative cash crops. An institutional innovation (contract farming) can thus serve to overcome market failures (in credit, inputs, technical assistance, and information). Success stories exist in Central America where subcontracting has been effective to help smallholders produce non-traditional exports (NTX), but only after a strong effort to organize them had been achieved by bilateral assistance programs (the Swiss development agency in the case of Cuatro Pinos in Guatemala). Serious questions arise, however, about the sustainability of these initiatives for smallholders. Increasing pest resistance, toxic buildups, and soil erosion have led to rapidly rising costs that exclude small farmers exposed to credit and insurance market failures. Experience shows that initially progressive patterns of adoption are followed by regressive screening of survivors (Conroy, Murray, and Rossett, 1996). From a policy standpoint, this implies that

complementary interventions for pest and soil management need to be introduced from the outset if early successes with NTXs are not to be followed by disasters for smallholders.

There may be a role for public policy that encourages contract farming, and contracting with smallholders, in promoting the formation of producers organizations (Key and Runsten, 1996). Producer organizations can lower contracting transaction costs for the firms and growers, and facilitate input and product deliveries. By working with producer groups, firm extension agents can meet with growers in groups rather than individually, and growers can bring soil or plant disease samples to extension meetings rather than have the extension agent visit the plots. Smaller growers are better able to assume the higher yield risk associated with cash crops if they are able to effectively insure themselves, via mutual insurance networks which take advantage of local information and self-monitoring. NGO or state assistance may be required to organize producers as firms may be reluctant to do so for fear that the organizations will be used for collective bargaining (Marsh and Runsten, 1994).

New market compatible policies for research and extension thus open a vast array of joint initiatives between government and producers organizations for the co-production of club goods and services (Evans, 1996). From a policy standpoint, the state needs to take a pro-active role in identifying areas and modalities for such co-production, for instance by promoting dialogue between producers organizations and specialized government agencies. In research and extension, the relative roles of state and civil society will no longer respond to preset formulas but will require innovativeness to adapt solutions to a highly heterogenous rural environment.

6. Irrigation

6.1. Policy reforms

Recent policy reforms designed to reduce the fiscal burden of irrigation systems and to increase the efficiency of these systems include: 1) lowering subsidies and raising user fees to cover operation and management costs; 2) decentralizing the management of irrigation systems and in some cases transferring (devolution) the management and even the ownership of the projects to water users; and 3) developing the use of water markets. Governments have reduced budgets for the construction of new irrigation projects, and current policies emphasize the rehabilitation and consolidation of existing facilities. New projects now face stricter economic criteria in evaluating their feasibility, and smaller projects are given preference over larger ones.

In Colombia, Law 41 of 1993 emphasized both efficiency and equity criteria in irrigation project construction. The law mandates community participation in project design, access by small farmers, and requires that 100% of operation and maintenance costs be recovered by users. HIMAT's role was redefined to be more in technical assistance rather than administration. In Mexico, expansion of irrigated land slowed and even became negative in the early 1990's. Slow growth was caused by reduced government expenditures on new irrigation projects that fell from US$3,600 million in 1981 to $230 million in 1990. Water policy reforms have: 1) raised the costs of water to producers in public irrigation districts, with users paying an estimated 83% of costs in 1992 compared to 18% in 1988; 2) decentralized water management units and begun to transfer irrigation districts to water users' organizations; 3) enacted stricter economic criteria for new project appraisal and emphasized rehabilitation and consolidation of existing facilities over new construction; and 4) changed the national water law to permit the development of water markets. The New Water Law of 1992 makes it legal to lease or sell water separate from land. In Peru, the Agricultural Investment Promotion Law of 1991 began the process of transferring the management and operation of public irrigation projects to user groups, and set water tariffs for full cost recovery of operation and maintenance.

6.2. Transitional issues

Obstacles to policy changes. There have been both bureaucratic and political obstacles to the implementation of policy reforms. It has proven difficult to raise user fees and lower subsidies. Vested interest groups that benefited from the construction or allocation of new irrigation projects have also resisted reforms. In Ecuador, irrigation continues to absorb a large fraction of the agricultural budget, and beneficiaries bear only a small part of project costs. Colombia has transferred systems to users but at a slow rate.

Property rights and water markets. Water markets require the separation of land and water rights. In most countries, property rights over water are poorly defined, limiting the emergence of water rights markets. In Chile, by far the most advanced Latin American country in organizing a market in water rights, a new water code was introduced by the military government in 1981. A distinction was made between owners of "consumptive" water rights (farmers) and owners of "non-consumptive" water rights (hydroelectric companies) who can divert water for their own use as long as they return it for use by downstream users. The objective of this separation was to give private incentives to the development of hydroelectrical capacity in the foothills of the Sierra above the irrigation districts. The double set of rights creates a conflict over the timing of release of the water flow which is not regulated by "non-consumptive" water rights. Hydroelectrical companies can store water when farmers need it and release it when they may not, without legal interference with farmers' water rights, yet creating strong inconveniences for them. Private bargaining between farmers and hydroelectrical companies has proved unable to resolve this conflict. This suggests that the currently incomplete definition of water rights will require further government intervention to introduce a time dimension in the definition of water rights. Technologically, water markets also require an ability to monitor and control water use on each plot. It may not be feasible to upgrade or retrofit existing projects with technology suitable for water markets. New projects will consequently need to be designed with this technological requirement in mind.

6.3. New market compatible polices

Private investment. Positive externalities may justify public investment in irrigation systems. Private investment can be encouraged via financial incentives and by constructing complementary infrastructure, such as roads and electricity. In most countries, particularly those emerging recently from stabilization policies, interest rates are extremely high and long term credit is not available. Until such credit is available, it is unrealistic to expect that private investment can substitute for the traditional role of governments in investing in irrigation projects.

Environment. Many feasibility studies and evaluations of irrigation projects fail to adequately account for the actual or potential environmental degradation resulting from irrigation, including salinization and alkalization of soils. In addition, watershed management to control soil erosion and the siltage of reservoirs must be an integral component of the management of irrigation schemes to achieve sustainability. This requires integrating the upstream and downstream interests under a single authority (such as the Cauca Valley authority in Colombia) or giving irrigated land to upstream households to create private incentives for soil conservation by upstream users, typically slash-and-burn subsistence farmers or extensive herders (Haiti).

Many international lending agencies have decided to add the constraint of sustainability to the requirements that new construction projects must satisfy. There is no accepted single definition of sustainability, but in general the concept refers to constraining resource use by the present generation so it does not imply lower welfare levels for future generations compared to the present generation (Brundtland, 1987). Sustainability is thus equivalent to inter-generational equity in resource use. In general, satisfying this criterion will imply resource transfers (tax-subsidies) from the present to future generations (for example by taxing part of the rent derived from use of a natural resource by present users and investing it into conservation or technological change). This

raises a host of important issues for the management and the credible implementation of these transfers. In general, the institutions necessary to implement these tasks are missing or, if they exist, they do not have the instruments to commit that the transfers necessary to achieve sustainability will effectively be implemented (see de Janvry, Sadoulet, and Santos, 1995).

Producers organizations. The successful decentralization of the management of irrigation systems or the devolution of ownership of the system to the users requires well functioning producers organizations. There is a role for government and NGOs in promoting these producers organizations and assisting them achieve effective cooperative behavior in the management of irrigation systems and other common property resources (Ostrom, 1993).

IV. Analysis

1. Responses to Globalization. Differentiated policies and interventions

In recent years, considerable emphasis has been placed on the implications of the heterogeneous nature of the rural population for the analysis of the differentiated impact of policy reforms and for the design of differentiated policies and interventions. Thus, while there has been an international process of homogenization of macropolicies to achieve stabilization and adjustment promoted by the Bretton Woods institutions and the "Washington Consensus", there have also been increasing, although yet mild and incomplete, attempts at identifying the differentiated microeconomic effects of these policies on heterogenous populations and at designing differentiated complementary micro policies and interventions. This emphasis on heterogeneity has its origin in several phenomena that are creating increasing demands for more differentiated government interventions:

1. Responses to the homogenization of macropolicies and to the associated process of globalization have been highly uneven. Some rural groups have expressed strong opposition to the process, even when the national economic impact of the reforms had been positive. Indeed, local responses to globalization is one of the currently most divisive issues for the social science profession, with economists usually arguing in favor of the global efficiency gains created by specialization and trade and other social scientists and NGOs arguing for greater equity in the distribution of benefits, preservation of access to place (rurality, rootedness), defense of local control over community welfare, and reproduction of cultural identity.[4] Negative local responses to the global policy reforms have threatened the political stability, and hence the sustainability, of the economic recoveries, sometimes triggering, as in the case of Chiapas, global economic recession and political destabilization.

2. Democratization and decentralization of governance have given heterogeneous constituencies more direct access to policy makers, allowing local governments to better respond to the differentiated demands for public interventions.

3. The rapid spread of non-governmental and grassroots organizations has increased the bargaining power of heterogeneous groups, allowing them to press more powerfully their demands for differentiated government interventions.

4. The rapidly increasing availability of detailed household-level survey data has allowed better characterization of the heterogeneous nature of the rural population. Analysis of these data

[4] Several international fora have addressed this issue, in particular the International Forum on Globalization, "The Social, Ecological, Cultural, and Political Costs of Economic Globalization" (George Washington University, May 10-12, 1996) and the 6th annual conference of the International Association for the Study of Common Property, "Voices from the Commons" (University of California at Berkeley, June 5-8, 1996).

helps identify the differential causes of poverty as well as the variety of options for exiting from poverty.

How are governments able to respond to these demands for more differentiated interventions? Under ISI and before the debt crisis, the old policy tools were:

- Blunt: real exchange rate appreciation, price interventions, and restrictive monetary policies have broad macroeconomic effects.
- Cheap: import tariffs and export taxes generate government revenues. These government revenues in turn allowed to fund compensatory subsidies for agriculture and soft budget constraints in parastatal services to agriculture.
- Extensive: massive price and interest rate distortions compared to FMFT equilibrium, both through indirect (exchange rate overvaluation and industrial protection) and direct interventions (trade policy, forced procurement) (Krueger, Shiff, and Valdés).
- Allowed for differentiation through macro-policy instruments: multiple exchange rate regimes, targeted interest rate subsidies to selectively compensate from price distortions, quantity restrictions, multiplicity of tariff levels.
- Exposed to rent seeking: targeted compensations for price distortions were generally appropriated through the forces of the political economy, for instance credit subsidies, creating major inequities.

Under stabilization and adjustment policies as well as in the context of democratization and decentralization of governance, the new policy instruments are:

- Constrained by loss of control over the traditional trade policy instruments (due to membership to GATT, NAFTA, and/or regional integration schemes) and severely limited by restrictive monetary policies (due to conditionality lending or self-imposed orthodoxy in controlling inflation and avoiding the crowing-out of financial markets by government borrowing).
- Constrained by stringent budget restrictions, in part due to the loss of revenues from trade taxes, limiting the scope of government interventions, particularly through subsidies.
- Better prone to co-production or co-management between government and heterogeneous constituencies as a consequence of increased participation and local definition associated with decentralization, democratization, and the rise of NGOs and GROs.

The key question regarding the usefulness of differentiated policies is whether they can be:

- More efficient as policy tools than non-differentiated interventions. A positive theoretical answer would be as follows. For efficiency purposes, government intervenes in response to market failures (e.g., economies of scale for ISI). If market failures are differential across economic agents, then the nature of compensatory government interventions should be correspondingly differentiated. Government interventions in compensation to market failures could thus be made more efficient.

- More equitable than non-differentiated policies. Again, from a theoretical standpoint, governments intervene when the welfare consequences of market forces are not desirable, in general because they leave too much poverty or create too much inequality. With greater decentralization and participation, differentiated government interventions can be better adjusted to the demands of local populations, unless they are captured by local interests. According to the nature of local governance, public interventions will be more or less effective to reduce poverty and inequality. In particular, differentiated interventions that are mediated through the local representation of communities (e.g., the Colombian Fondos Municipales de Cofinanciación and the Peruvian FONCODE) are effective to reach poor communities and to adapt the use of public funds to their needs, but they may not be effective to reach the poorest within these communities since it is the community itself that decides on the intra-community allocation of resources.

There are two approaches to seeking differentiated effects through policy interventions:

1. One is through single or indiscriminated policies which have differentiated effects. In this case, differentiated effects can be adjusted through the choice of policy instruments in terms of their expected differential effects. For instance, a real devaluation of the nominal exchange rate will raise the price of food, benefiting net-sellers, leaving unaffected self-sufficient households, and hurting net-buyers. Policy can also be made by crops which, after allowing for substitution effects in production and consumption, will differentially benefit those households producing or consuming that crop. Similarly, policy can be made by region which, after allowing for secondary trade, will differentially affect those living in that region.

2. The other is through differentiated policies or through differentiated public programs and interventions. In general, a differentiated policy will consist less in the direct use of a differentiated policy instrument (e.g., a price policy targeting a crop or a region) than in the delineation of a strategy of differentiated programmatic interventions (e.g., a policy defining a set of interventions to differentially benefit indigenous populations). The key issue for differentiated interventions is the ability to exclude so that the intervention be effectively differential.

Excludability thus opens the subject of targeting: How to identify the beneficiaries? How to exclude others and avoid capture by non-targeted users? How to establish the optimum leakage from a cost/benefit standpoint given the fact that there are increasing costs from precision in targeting? How to manage the political economy of targeting? How to establish optimum leakages to achieve political feasibility?[5]

How to design and implement differentiated interventions?

Differentiated interventions are not new, but recent progress in decentralization, democratization, and increased participation of civil society through representative grassroots and corporatist organizations give new potential for differentiated interventions to play more effectively in favor of the rural poor. For the allocation of public resources to the delivery of local public goods and services, decentralized co-financing funds have been introduced. This raises several issues:

Decentralization of the allocation of public funds to the community level through Fondos de Cofinanciación is a powerful instrument for the co-production of public goods between state and civil society that allows to differentiate the production of public goods in response to community demand and to mobilize local resource for co-financing. It has been used successfully in Colombia (DRI), Peru (FONCODE), Mexico (Pronasol), Bolivia (Ley de Participación Popular), and projects funded by IFAD (Community Development Funds) and the World Bank (Social Action Funds). In following this approach, the unit of attention in government programs is shifted from the individual to the rural community. This raises two important issues:

- How to maintain coherence with policy objectives when control over funds is delegated to the community?
- How to reach the poor when the community gains control over the intra-community allocation of resources?

Consistency with government policy can be partially obtained by offering to the community different rates of co-financing according to types of programs, where rates increase with government priorities. In Colombia, the percentages of co-financing vary by types of projects, and these rates also vary with the Index of Municipal Development that characterizes every particular municipio. In the end, municipios receive three types of transfers: fiscal funds from the center, funds for the co-financing of projects, and subsidies for specific purposes. Yet, it is the case that projects tend to be very dispersed with little overall strategic vision, even though they must be part

[5] See the discussion in Lipton and Ravallion, 1995.

of a municipal plan and need to be approved by the Consejo Municipal de Desarrollo Rural and by the governor of the state. In addition, resources tend to concentrate toward the municipios with more managerial ability, which tends to be the already better-off municipios. The result is a process of acceleration in the differentiation of municipios regarding the quality of public goods and services. Counteracting this process, the availability of discretionary resources at the community level induces communities to formulate projects and hence to increase demand for co-financing. While, in a first stage, better off communities are more effective in submitting projects for co-financing, in a second stage, learning to organize, cooperate, and formulate projects should allow other communities to become more effective in competing for funds over time. This ability to learn can importantly be assisted by NGOs.

Targeting within the community is in principle impossible when the allocation of funds is made the responsibility of the community. As a consequence, while poorer communities, characterized by a low Index of Municipal Development (Colombia) or a high Municipal Marginality Index (Mexico) can be differentially targeted, whether the poor within these communities are reached or not depends on the local power structure of the communities. And this local power structure may be more regressive than desired by the central government. There are several mechanisms that can be called upon to improve the likelihood that the poor will be reached:

- NGOs can be used to help the poor organize and formulate projects that can be submitted for funding. Important is to assist the poor to gain due representation in the Consejos Municipales de Desarrollo Rural or other decentralized entities that allocate funds competitively.
- Conditions can be placed on communities to qualify for funds under more attractive conditions according to their ability of reaching the poor. For this purpose, close monitoring of poverty needs to be put into place so that progress in some indicators can be used for these conditionalities. Monitoring should be organized as a joint process between central state and communities. All too often, monitoring is largely absent or ineffective.
- Decentralized interventions can be combined with other dimensions of social policy that eventually seek to compensate for what decentralized allocations do not achieve.

2. Poverty reduction programs

Market liberalization has meant the end of blunt, economy-wide poverty programs such as staple food crop price subsidies (both higher sale prices and reduced purchase prices compared to FMFT prices), subsidized credit, and subsidized inputs, especially fertilizer and water. These price policies were deemed failures because they distorted incentives leading to an inefficient allocation of resources, encouraged rent seeking behavior, and had high degrees of "leakage" of benefits to the non-poor. Targeted food subsidies and social funds attempt to minimize economic distortions and government fiscal burdens, while maximizing the beneficial impact of the program on the selected group.

Targeting. Increased attention has been placed on targeting as a means of improving the cost-effectiveness of programs, and reducing economic distortions (Gill, Indermit, Jimenez, and Shalizi, 1990; Grosh, 1994; Haddad and Kanbur, 1991; Ravallion, 1993). Targeting can reduce the fiscal costs of a program by directing resources towards a selected group. However, there are costs associated with administering a targeted program that increase with precision in targeting (Besley and Kanbur, 1990). Economic distortions and inefficiencies result from most types of poverty programs, including targeted programs. There will be price distortions in the markets associated with the goods being provided by the program (e.g., food, health care, jobs), there will be income effects that distort labor-leisure allocations, and there will be incentives to relocate to areas providing the programs. Targeted programs, because they are more concentrated in scope, can impose a reduced distortionary impact on the economy. In implementing targeting, policy makers must determine what type of targeting method (individual, group, regional, or self-targeting) is most efficient in terms of costs, and in terms of the optimal tradeoff between

minimizing overcoverage (incorrectly classifying a non-poor person as poor) and undercoverage (incorrectly classifying a poor person as non-poor).

Social funds. Social funds are institutions set up to fund small scale development projects. The projects usually include construction or rehabilitation of infrastructure using labor intensive methods. Projects include construction of schools, clinics, roads, water, and sanitation facilities. The idea is to create employment in the process of construction as well as benefits from the finished project (Grosh, 1995). Social funds offer advantages over traditional projects: 1) they are demand driven and hence responsive to the needs of the beneficiaries, 2) they operate to a large extent outside the realm of public bureaucracy, and 3) they employ low income community members.

An important political problem in the management of social funds is whether to jump over intermediate levels of government to reach directly the institutions and individuals engaged in the management of the social fund. In many situations, this is a tempting option, particularly for the short run. Intermediate levels of government may be non-representative and seriously under-equipped to fulfill their new functions. From a long term perspective, however, jumping over the intermediate levels of government is not desirable. Alienating these levels of government is not favorable for the integrity and the continuity of the program. And, for the long term purpose of democratic construction, involving these levels of government is fundamental. Thus, short run expediency (unless the program is clearly seen as a one-shot relief operation) needs to be clearly weighted against broader long term gains in deciding to involve or not these levels of governance.

Transitory and chronic poverty. In the context of the debt crisis and implementation of stabilization and adjustment policies, attention has been given to transitory poverty in order to manage the political feasibility of the reforms. The main instrument for this purpose has been the use of social funds and implementation of safety nets. If economic shocks are recurrent, as in agriculture where incomes are exposed to climatic fluctuations in addition to policy shocks, reducing transitory poverty requires providing the rural poor with access to risk coping instruments so they can reduce the need to engage in costly risk management (Alderman and Paxon). Rural insurance schemes are, however, hopelessly exposed to moral hazard problems due to the difficulty of verifying insurance claims. These moral hazards can be effectively controlled through mutual insurance, but the ability of the community to effectively insure is limited by high local covariation of incomes. Again, the solution to this dilemma may be in the integration of local/traditional institutions with regional/modern institutions, thus combining the advantages of information and portfolio diversification for successful insurance.

In recent years, with the restoration of growth high on the policy agenda, chronic poverty has been badly neglected, leading to eventually explosive responses to the frustrations of marginalization and social exclusion in the context of globalization (viz. the Zapatistas and the EPR in Mexico, rural violence in Colombia, and guerrilla movements in Peru). For Latin America, and particularly for agricultural and rural policy makers, devising schemes to reduce chronic poverty is probably the greatest challenge ahead (Gore, 1995; The Economist, 1996). This implies increasing the productivity of the poor. Doing this requires achieving four policy objectives:

i) Increasing the poor's access to assets: assets are multidimensional including most particularly agricultural capital (land and water), microenterprise capital, human capital (education, health), social and organizational capital (access to credit, membership to organizations), political capital (access to the state and to public goods and services), and migration capital (kinship and community networks of migrants).

ii) Increasing productivity in the use of these assets: this is the objective of rural development programs. Technological change and the diffusion of innovations are the key instruments to achieve this goal.

iii) Improving the context that gives value to the use of these assets: favorable prices for the products and factors sold and a favorable investment climate.

iv) Improving the linkages between the poor and markets and public services by reducing transactions costs to enhance the value (effective prices paid and received, relaxation of constraints in access) derived from productive use of the assets they control.

3. Institutional reforms and decentralization.

Decentralization programs that transfer responsibilities from the central government to the sub-national government have been enacted in many countries of Latin America, including Bolivia, Brazil, Colombia, Ecuador, Guatemala, Mexico, and Venezuela (Ruflán, 1993). Decentralization can take a variety forms (administrative, political, economic) and can be carried out to varying degrees: *deconcentration*, which occurs within a given level of government; *delegation*, when a higher level of government passes some authority along to a lower level, but maintains the ultimate decision making power; and *devolution*, when full responsibility to determine and execute policies and projects is transferred to lower levels of government. These programs are motivated by the quest for increasing the efficiency and effectiveness of the public sector.

In terms of criteria for what should be decentralized, functions that can decrease cost, increase quality, or increase participation should all be candidates for decentralization. Specifically regarding rural development, administrative and political decentralization (preferably devolution) can lead to a number of benefits related to participation, responsiveness, efficiency and effectiveness of policies, and ultimately greater local economic growth and poverty reduction (Chiriboga, 1994). For example, municipal governments are likely to be in a better position to identify local needs and demands, and can thus design a more appropriate set of rural development policies than central governments. In terms of incentives, the more local actors are involved, and the more they feel that the money and the projects are their own, the more they are likely to care about the efficiency with which the money is spent, and, perhaps, the less likely they are to evade taxes. Politically, if decision making authority comes from fair and open elections at a local level, then decentralization can contribute to overcoming problems of legitimacy that many authoritarian governments have confronted. And, economically, the closeness of actors (government, business, GROs, universities) can contribute to an interactive process, leading to more creative solutions and greater local economic dynamism. There are, however, risks associated with decentralization such as local control by powerful minorities and reproduction at the local level of urban biases. Nevertheless, when all of these factors are combined, a strong argument can be made for the potential superiority of local government in the design and management of rural development projects.

The extent to which decentralization can improve efficiency will depend to a large degree on the local public choice mechanisms. Systems that have a democratic component -- where voters decide specific tax-expenditure measures or indirectly elect government officials -- provide a more efficient mechanism for the population to express its preferences and achieve accountability. Accountability, in turn, depends on the availability of public information such as financial statements, and evaluations of cost and performance of public programs (Winkler, 1994). Increasing efficiency through increased accountability requires that local governments have real authority. In particular, local governments must have the authority to raise local revenues and set expenditure levels to meet the needs of the local populace. They must also have budgetary discretion in regards to personnel, contracting, and determining local expenditures. The expectations and obligations of local governments must be clearly specified and their jurisdictions clearly delineated.

Decentralization involves, to various degrees, both administrative decentralization--increased regional authority over policy making--, and fiscal decentralization--increased regional autonomy in terms of tax and spending decisions. The balance between, and extent of

administrative and fiscal decentralization depend on tradeoffs between administrative and allocative efficiency, and economy-wide redistributive efficiency (Musgrave, 1991). While increased administrative decentralization can increase the responsiveness of the state to local needs, fiscal autonomy can inhibit redistributive transfers from more to less prosperous regions. That is, poor regions that lag behind more prosperous ones will stand to lose federal financial resources for development with increased fiscal decentralization. Inequitable interjurisdictional differences may also have efficiency costs. If similar individuals receive different services depending on which jurisdiction they fall, then there is an incentive for individuals to relocate resulting in possible economic inefficiencies.

Potential efficiency and equity costs to decentralization provide a rationale for a central government's role in equalizing the fiscal capacity of jurisdictions. Brazil has both a state revenue sharing fund and a municipal revenue sharing fund which partially equalize fiscal capacity. Chile's municipal common fund redistributes property tax revenue among municipalities (Winkler, 1994). Disparities are particularly important in the provision of services, such as education, health, or nutrition, where the government wishes to maintain some minimal standard of support. Equity can be maintained in these areas via program specific inter-governmental transfers.

In practice, there are a number of obstacles that inhibit success and point to decentralization as a gradual process that requires the continued involvement of the central government. In a review of rural development decentralization experiences in Latin America, Chiriboga (1994) suggests that two of the most serious constraints have been the limited financial, technical, and human resources of local governments, and the traditional forms of exercising local political power, based on clientelism, personal relations, and elite domination. Both of these issues point to the need for modernizing municipal government and for a crucial role for central government in adequately training local administrators. There is thus a need for identifying the appropriate complementary roles between different levels of government. In addition, devolution without a corresponding transfer of revenues has often led to deterioration in the quality and efficiency of services (an indication of decentralization as part of state contraction and government failure, rather than as part of a redefined functional role).

4. Institutional reconstruction: the transition from public to private institutions

Privatization of parastatals and descaling of the direct role of the state in the economy have removed many of the public institutions that served agriculture. In the place of state institutions, civil institutions are beginning to emerge. The transition away from public and towards private institutions has impacted different segments of the population disproportionately. In general, larger-scale commercial agriculture and producers of export crops have more successfully adapted to the use of private institutions than has the smaller-scale, food-crops oriented traditional sector. The commercial sector has been able to utilize civil institutions such as commercial banks, agro-industrial contractors, private merchants, producers' organizations, and private technical assistance providers. In contrast, the small to medium scale producers, and producers in less favored regions, have been less able to gain access to or create private sector replacements for the services that had been provided by public rural development programs, leaving for them serious institutional gaps.

Civil institutions that serve the smallholder economy have been slower to emerge, placing smallholders at a competitive disadvantage during the transition period. These institutions are key to enabling smallholders to reduce transactions costs in production, finance, input acquisition, and marketing. Institutions that can lower transactions costs for smallholders may be slow to emerge naturally because they require more organization and cooperation. Many local, often traditional, institutions had been suppressed by preponderance of the state, particularly where the state had been more forceful in managing agriculture such as in Mexico and Brazil. There is now a role for

the state to encourage the creation of these institutions during the short run and to facilitate their functioning during the long term.

Institutions that can successfully substitute for the former government services should capitalize on the unique information and enforcement advantages of local institutions. These institutions can use local information and social sanctions to control for adverse selection and moral hazards in contractual relations. They can lower enforcement and monitoring costs and enforce cooperative solutions by employing interlinked transactions, social pressure, reputation, and repeated games with no exit option. Civil institutions that have been able to harness local information include group lending schemes, credit unions, savings and loan associations, financial NGO's, marketing cooperatives, and community storage organizations. Other local institutions include community based organizations that interface with government social funds for the construction and maintenance of public infrastructure, and common property resource management, including pastures, forestry, and water resources. The revitalization of local institutions has thus an important efficiency purpose. Revitalization goes through the revalorization of local culture, the consolidation of community social relations, and preservation of the concepts of rurality and place. Linkages between local, regional, and national institutions is fundamental to allow for diversification of risks and access to broader markets. In a sense, this linkage between the local and the global should be an important dimension of the response to globalization since it gives to local institutions a fundamental role in the competitiveness of regional economies, and hence also an economic logic for their preservation and consolidation.

5. Sequencing of reforms

The differential impact of policy reforms can have important long run equity and efficiency implications in the context of land market liberalization and agrarian reform. As land markets become liberalized, land prices will eventually reflect the present value of the stream of profits generated by the land. Over time, land will become concentrated in the hands of producers earning the highest profits (Carter and Mesbah, 1993). We argued above that the institutional gaps in the transition period have caused small and medium sized landholders to be at a competitive disadvantage to commercial farmers. Hence, with liberalized land markets and undeveloped smallholder institutions, the forces are in place for landholdings to become concentrated in the hands of the larger commercial classes, even if they are not the most efficient producers. An alternative scenario, that delays the liberalization of the land market and encourages the emergence of smallholder institutions would be superior both in terms of equity and efficiency. A sequencing of reforms that aims at preserving a thriving smallholder class would thus proceed first with reconstruction of the agrarian institutions supportive of the competitiveness of smallholders before engaging in a wholesale liberalization of the land market.

V. New challenges in agricultural and rural development policy

Latin American agricultural and rural development policy is at a turning point that will require bold new initiatives to improve the production performance of agriculture, reduce rural poverty, and insure the political sustainability of economic growth. This will require transforming sectoral policies from the status of appendage of macro economic and political reforms in which it has fallen since the early 1980s to a pro-active set of interventions designed at restoring the specificity of agricultural policy while maintaining consistency with the macro reforms. Using as a guideline the trichotomy between market, state, and civil society, agricultural and rural policy, since the shock of the debt crisis, can be characterized as follows:

1. Macroeconomic reforms, driven by the need to address global economic crises, have profoundly enhanced the role of the market as a driving force, with adjustment policies pursuing the general implementation of free market-free trade policies. For individual producers, these

reforms have redefined the rules of competitiveness in the context of rapid exposure to globalization, most often without explicit policies to manage transition strategies. This has typically benefited agriculture through enhanced price incentives, but has left agriculture, and particularly smallholders, with limited abilities to seize market opportunities, displaying low elasticities of supply response. Due to chronically low domestic savings rates, sustained growth has been sustained by foreign capital inflows and appreciated real exchange rates that have dampened price incentives for agriculture. Important market failures remain that need to be addressed through public interventions and civil institutions. The result has been weak production performance, increasing resistance to the reforms and hence incomplete implementation, and demands for new forms of protection.

2. An extensive redefinition of the role of the state in relation to the market, with privatizations, descaling of the bureaucratic apparatus, loss of fiscal revenues, and evolution toward more regulatory functions as opposed to direct intervention in the economy. This has opened large institutional gaps in the support that government agencies were traditionally providing agriculture, smallholders in particular. Institutional reconstruction, with a rising role of the private sector, has been very partial at best, leaving a large majority of smallholders exposed to lack of access to financial services, insurance, information, and technical change and high transactions costs in accessing markets. At the same time, significant progress has been made toward more democratic forms of representation and decentralization of governance. This has opened many highly creative avenues for new partnerships between state and civil society in the definition of policy and the provision of public goods. Yet, extensive government failures remain with increasing levels of public sector corruption and rent seeking that distort policy making and the appropriation of public goods. In addition, in spite of regional trade agreement and specialized international conventions, government authority has failed to transgress national boundaries, leaving to the market and civil society the ability to globalize while losing control over these dimensions of their activities. Finally, in many instances, governments have been unable to secure the political sustainability of the reforms in progress, inducing powerful backlash that compromise the economic and political reforms pursued.

3. The social side of the new growth model remains highly problematic. Ability for governments to manage these problems will be the acid test of success of the reforms. Rural poverty remains extensive, inequality is rising in both the rural and urban sectors, modernization of agriculture has been highly selective with increased opportunities for social differentiation as a consequence of deepening of the market reforms and descaling of state support, migration has increased the feminization and ethinicization of the rural poor, heterogeneity of income strategies has increased, the ability of governments to manage the social costs of transition has been weakened by shrinking public budgets, and social exclusion from the benefits of globalization and democratization have become more blatant and explosive. Yet, very important progress has been made in enabling civil society to play a greater role both in the direct management of economic and social affairs and in the ability to dialogue and influence governments. There has been an explosion in the number of producers, grassroots, and non-governmental organizations, and these have effectively developed national and international networks, enabling them to partake in the process of globalization. It is these organizations that allow to sustain a new partnership between the state and civil society that opens many new perspectives for policy design and policy implementation. It is also these organizations that open possibilities of defining responses to economic globalizations for local communities while preserving local culture, languages, identities, community relations, and attachment to place. It is also these organizations that have a major role as advocates of human rights, ethnic and minority representation, gender rights, and environmental protection. They are important to service the needs of informal sector activities and smallholders. At the same time, the economic and social potential of these organizations remains incipient compared to potential. They tend to be exclusive of the poorest, territorial, often ineffective in the pursuit of economic affairs, and still largely misunderstood by governments and some of the main international development agencies.

This perspective opens a vast array of opportunities for new departures toward a more effective agricultural and rural policy compatible with but not subordinate to macropolicy reforms. The fundamental directions for a pro-active approach to agricultural and rural development policy should seek:

For the market: completion of the reforms in progress with adequate management of political backlash created by both transitory poverty and social exclusion.
For the state: reconstruction of a developmental state and evolution toward global governance.
For civil society: promotion of civil institutions and reliance on active participation of these institutions for policy making and the co-production of public goods and services.

We conclude by identifying some of the aspects of this policy agenda:

1. Regulatory framework: While promotion of FMFT policies is well advanced, definition and implementation of a regulatory framework to cope with market failures is still grossly incomplete. This requires provisions to enforce competitiveness, internalize externalities, and promote sustainability in resource use.

2. Bureaucratic capability: An effective developmental state requires an effective civil service sector, in particular at the municipal level where decisions are increasingly decentralized.

3. Enforcement of the rule of law: An interesting approach is that followed by NAFTA for the enforcement of labor and environmental laws. In this case, citizens and organized groups are entrusted the responsibility of identifying and exposing violations of the laws prevailing in any of the three member countries. With progress toward a LAFTA, reliance on civil society as a source of information and development of a set of institutions for appeals and sanctions can be an effective mechanism to promote the rule of law. Implementation depends on greater popular participation and effective instrumentalization of the process of appeals and sanctions.

4. Reorganization of the administrative sector: Many issues that are high on a proactive development agenda fall outside the responsibilities of the traditional ministerial system. This is the case for rural development, the promotion and regulation of microenterprises, and environmental regulation. These issues are often handled by special coordinating committees. They, however, are typically short lived and weak both in analytical power, particularly economics, and implementation capacity.

5. Institutional reconstruction: Key for this is to promote local organizations and to seek institutional solutions that capitalize on the superior ability of local organizations to control problems of moral hazard and adverse selection because of their informational advantages. These local organizations need to be linked to national and international organizations with greater access to deeper markets and diversified sources of risk.

6. Attack rural poverty: This needs to be done as a multipronged problem that privileges the heterogeneous character of poverty and the multiplicity of available solutions to overcome poverty. This includes access to assets (broadly defined), enhancement of productivity in the use of these assets, promotion of effective linkages to markets and access to public goods and services, and a favorable context in terms of profitability and the investment climate.

7. Reduce social exclusion: The greatest threat to sustainable growth is inability to incorporate in the new growth models large segments of the population. Important is to identify windows of opportunity for these populations that allow them to partake in the benefits of globalization while satisfying their particular objectives for attachment to community and to place.

8. Rebuild the scientific, technical, and educational institutions: These have in many counties been severely atrophied by implementation of stabilization policies that have sought short run results at the cost of social investment. With the recovery of growth, reconstructing the institutions that deliver the most important sources of growth is an essential task for governments.

9. Build countries policy-making and project-designing capacities: Instead of solving policy problems through policy advice, more important is to put in place an effective participatory policy making process that can continuously address the needs for policy reforms. This requires focusing on the political economy of policy making, more specifically on identification of the stakeholders involved, the institutional mechanisms through which they relate, and the processes of policy dialogue and conflict resolution in the definition and implementation of policy. The same applies to projects. Effective rural development interventions requires construction of a project-making process that is demand-led and continuously adjusts the definition of such projects to the changingneeds of organized grassroots participants.

Figures and Tables

Figure 1. Relation between GDP and Agricultural growth

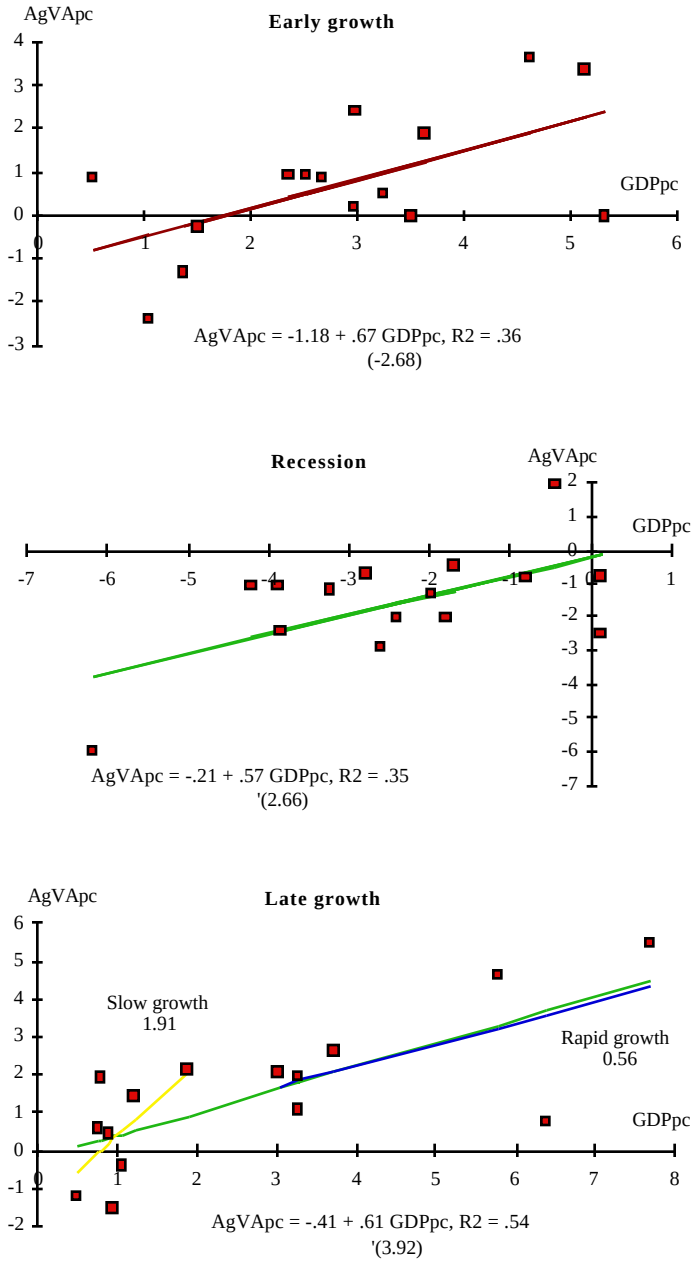

Table 1. Gross domestic product per capita (estimated annual growth rate, constant local currency)

	1. Early growth			2. Recession			3. Late growth			Periods 2&3			All years
Rapid late growth	rate	years	length	rate	years	length	rate	years	length	rate	years	length	rate
Peru	1.04	70-81	11	-2.79	81-92	11	7.70	92-94	2	-2.24	81-94	13	-0.96
Argentina	0.52	70-80	10	-1.68	80-90	10	6.39	90-94	4	-0.11	80-94	14	-0.44
Belize(WB data)	4.62	70-80	10	-2.40	80-85	5	5.78	85-93	8	2.93	80-93	13	3.02
El Salvador(to 93)	2.36	70-78	8	-2.60	78-89	12	3.73	89-93	4	-0.97	78-93	15	-0.91
Dominican Republic (to 93)	2.67	70-83	13	0.12	83-91	8	3.28	91-93	2	0.32	83-93	10	1.23
Costa Rica	3.51	70-79	9	-3.23	79-85	6	3.27	85-94	9	1.13	79-94	15	1.00
Uruguay	2.52	70-81	11	-6.18	81-84	3	3.02	84-94	10	1.84	81-94	13	1.35
group average	2.46		10.29	-2.68		7.86	4.74		5.57	0.42		13.29	0.61
Slow late growth													
Colombia	2.98	70-80	10	0.13	80-85	5	1.87	85-94	9	1.57	80-94	14	1.91
Ecuador	5.33	70-81	11	-0.44	81-89	8	1.22	89-94	5	0.20	81-94	13	1.69
Mexico	3.25	70-81	11	-1.98	81-88	7	1.06	88-94	6	-0.41	81-94	13	1.02
Venezuela	1.49	70-77	7	-3.86	77-85	8	0.95	85-94	9	-0.29	77-94	17	-0.77
Guatemala	2.97	70-80	10	-3.85	80-86	6	0.89	86-94	8	-0.94	80-94	14	-0.08
Paraguay	5.14	70-81	11	-1.79	81-86	5	0.80	86-94	8	0.20	81-94	13	2.16
Honduras	1.38	70-79	9	-0.80	79-90	11	0.78	90-94	4	-0.34	79-94	15	0.13
Bolivia(to 93)	3.63	70-78	8	-4.21	78-86	8	0.50	86-93	7	-2.27	78-93	15	-1.03
group average	3.27		9.63	-2.10		7.25	1.01		7.00	-0.29		14.25	0.63
both groups average	2.90		9.93	-2.37		7.53	2.75		6.33	0.04		13.80	0.62
Other countries													
Brazil(to 93)	5.52	70-80	10	-0.06	80-93	13		**	**	-0.06	80-93	13	1.61
Haiti	2.71	70-80	10	-3.75	80-94	14		**	**	-3.75	80-94	14	-1.26
Nicaragua	2.70	70-77	7	-5.56	77-94	17		**	**	-5.56	77-94	17	-4.81
Jamaica (to 93)	-2.35	70-85	15		**	**	3.34	85-93	8	3.34	85-93	8	-0.80
Chile	0.33	70-81	11	-9.20	81-83	2	4.92	83-94	7	3.71	81-94	13	1.65

Table 2. Real exchange rate (estimated annual growth rate)

	1. Early growth		2. Recession		3. Late growth		Periods 2&3		All years
Rapid late growth	rate	year	rate	year	rate	year	rate	year	rate
Peru	6.01	70-81	-9.54	81-92	-13.53	92-94	-12.09	81-94**	-2.06
Argentina	-0.19	70-80	7.16	80-90	-16.43	90-94	-7.24	80-94	-0.03
Belize (from 1980)		70-80	-3.08	80-85	-0.10	85-94	-1.18	80-94	
El Salvador	-1.00	70-78	-5.53	78-89	-3.91	89-94	-4.07	78-94	-3.79
Dominican Republic (to 93)	-1.08	70-83	5.67	83-91	-3.31	91-93	1.29	83-93	1.56
Costa Rica	1.82	70-79	6.06	79-85	-1.71	85-94	-0.60	79-94	2.75
Uruguay	-3.94	70-81	29.13	81-84	-8.69	84-94	-4.37	81-94	-0.66
group average	0.27		4.26		-6.81		-4.04		-0.37
Slow late growth									
Colombia	-1.10	70-80	6.79	80-85	-1.65	85-94	2.88	80-94	1.62
Ecuador	-3.29	70-81	12.23	81-89	-9.92	89-94	4.16	81-94	2.32
Mexico	0.59	70-81	3.14	81-88	-3.80	88-94	-4.99	81-94	0.55
Venezuela	2.38	70-77	-0.27	77-85	2.25	85-94	5.51	77-94	3.07
Guatemala	-1.13	70-80	2.19	80-86	-2.65	86-94	2.53	80-94	1.11
Paraguay	-3.12	70-81	14.89	81-86	-0.83	86-94	4.74	81-94	1.26
Honduras	1.85	70-79	-4.08	79-90	21.48	90-94	1.71	79-94	0.34
Bolivia	-1.82	70-78	12.58	78-86	0.07	86-94	-0.27	78-94	0.85
group average	-0.71		5.93		0.62		2.03		1.39
both groups average	-0.29		5.16		-2.85		-0.80		0.63
Other countries									
Brazil	4.53	70-80	0.31	80-94**		**	0.31	80-94**	4.61
Haiti	-0.96	70-80	-0.22	80-94**		**	-0.22	80-94**	-1.10
Nicaragua (72- 92)	-0.45	72-77	-6.39	77-92**		**	-6.39	77-92**	-6.40
Jamaica	3.24	70-85		**	2.16	85-94**	2.16	85-94**	3.01
Chile	4.01	70-81	28.73	81-83	-2.78	83-94	0.09	81-94	2.54

Table 3. Inflation (estimated annual)

	1. Early growth		2. Recession		3. Late growth		Periods 2&3		All years
Rapid late growth	rate	year	rate	year	rate	year	rate	year	rate
Peru	33.46	70-81	389.97	81-92	35.59	92-94	370.03	81-94**	144.35
Argentina	134.53	70-80	390.55	80-90	35.67	90-94	351.88	80-94	242.38
Belize (from 1980)		70-80	5.79	80-85	2.27	85-94	3.07	80-94	
El Salvador	10.30	70-78	18.10	78-89	15.27	89-94	18.39	78-94	15.93
Dominican Republic (to 93)	10.20	70-83	33.94	83-91	4.92	91-93	32.24	83-93	17.60
Costa Rica	11.32	70-79	36.00	79-85	18.73	85-94	22.24	79-94	19.98
Uruguay	63.52	70-81	41.10	81-84	76.51	84-94	70.87	81-94	61.37
group average	43.89		130.78		26.99		124.10		83.60
Slow late growth									
Colombia	21.99	70-80	21.68	80-85	26.36	85-94	24.27	80-94	23.54
Ecuador	13.27	70-81	35.31	81-89	46.03	89-94	42.65	81-94	26.87
Mexico	18.11	70-81	84.10	81-88	17.38	88-94	54.80	81-94	42.20
Venezuela	6.52	70-77	12.74	77-85	37.58	85-94	28.20	77-94	17.95
Guatemala	10.68	70-80	9.76	80-86	19.18	86-94	16.59	80-94	12.91
Paraguay	13.08	70-81	19.30	81-86	24.03	86-94	23.61	81-94	18.34
Honduras	7.23	70-79	6.85	79-90	16.61	90-94	9.87	79-94	9.09
Bolivia	18.19	70-78	344.97	78-86	14.80	86-94	169.15	78-94	113.13
group average	13.63		66.84		25.24		46.14		33.00
all groups aver.	26.60		96.68		26.06		82.52		54.69
Brazil	33.82	70-80	494.48	80-94**		**	494.48	80-94**	189.38
Haiti	10.49	70-80	8.94	80-94**		**	8.94	80-94**	9.13
Nicaragua (72- 92)	10.87	72-77	427.45	77-92**		**	427.45	77-92**	209.17
Jamaica	18.46	70-85		**	27.41	85-94**	27.41	85-94**	19.76
Chile	145.54	70-81	18.28	81-83	19.22	83-94	19.75	81-94	51.09

Table 4. Government expenditure (estimated annual growth rate, constant local currency)

	1. Early growth		2. Recession		3. Late growth		Periods 2&3		All years
Rapid late growth	rate	year	rate	year	rate	year	rate	year	rate
Peru	5.65	70-81	-11.10	81-92	10.02	92-94	-9.58	81-94**	-2.57
Argentina (no data)		70-80		80-90		90-94		80-94	
Belize (no data)		70-80		80-85		85-94		80-94	
El Salvador	9.71	70-78	-6.59	78-89	9.72	89-94	-3.92	78-94	-1.13
Dominican Republic (to 93)	2.51	70-83	-1.39	83-91	34.06	91-93	0.92	83-93	1.13
Costa Rica	14.22	70-79	-1.01	79-85	5.81	85-94	5.13	79-94	7.18
Uruguay	3.74	70-81	-7.52	81-84	5.33	84-94	2.99	81-94	2.49
group average	7.17		-5.52		12.99		-0.89		1.42
Slow late growth									
Colombia (71-93)	5.35	71-80	4.38	80-85	3.40	85-93	3.75	80-93	5.28
Ecuador (no data)		70-81		81-89		89-94		81-94	
Mexico (from 71)	15.96	71-81	0.01	81-88	-3.49	88-94	-3.09	81-94	6.47
Venezuela	16.86	70-77	-0.90	77-85	-0.56	85-94	-1.19	77-94	2.68
Guatemala	8.63	70-80	-8.57	80-86	1.54	86-94	-1.02	80-94	2.79
Paraguay (to 93)	7.71	70-81	-3.90	81-86	13.53	86-93	6.01	81-93	5.61
Honduras	6.86	70-79	2.72	79-90	0.31	90-94	1.27	79-94	4.41
Bolivia (77-93)		70-78	8.35	78-86	12.08	86-93	-0.65	78-93	
group average	10.23		0.30		3.83		0.73		4.54
all groups aver.	8.84		-2.13		7.65		0.05		3.12
Brazil(to 92)	13.57	70-80	4.54	80-94**		**	4.54	80-92**	8.46
Haiti (no data)		70-80		80-94**		**		80-94**	
Nicaragua (72- 92)	12.28	72-77	-8.71	77-92**		**	-8.71	77-92**	-3.87
Jamaica (no data)		70-85		**		85-94**		85-94**	
Chile	10.79	70-81	-2.64	81-83	2.12	83-94	1.56	81-94	4.45

Table 5. Agricultural value added per capita (estimated annual growth rate, constant local currency)

	1. Early growth		2. Recession		3. Late growth		Periods 2&3		All years
Rapid late growth	rate	year	rate	year	rate	year	rate	year	rate
Peru	-2.41	70-81	-0.71	81-92	5.48	92-93	-0.85	81-93	-1.26
Argentina (to 92)	0.86	70-80	-0.48	80-90	0.74	90-93	-0.09	80-93	0.07
Belize (73-93)	3.62	73-80	-2.03	80-85	4.61	85-93	1.74	80-93	1.44
El Salvador	0.92	70-78	-2.93	78-89	2.64	89-93	-1.59	78-93	-0.99
Dominican Republic	0.86	70-83	-2.49	83-91	1.04	91-93	-1.92	83-93	-0.34
Costa Rica	-0.06	70-79	-1.18	79-85	1.93	85-93	0.50	79-93	-0.15
Uruguay	0.93	70-81	-6.02	81-84	2.06	84-93	0.61	81-93	0.63
group average	0.67		-2.26		2.64		-0.23		-0.09
Slow late growth									
Colombia	2.40	70-80	-0.76	80-85	2.11	85-93	1.24	80-93	1.36
Ecuador	-0.04	70-81	1.92	81-89	1.41	89-93	2.18	81-93	0.66
Mexico	0.51	70-81	-1.31	81-88	-0.45	88-93	-1.40	81-93	-0.29
Venezuela	-0.27	70-77	-1.08	77-85	-1.51	85-93	-0.30	77-93	-0.33
Guatemala (SOFA data)	0.18	70-80	-2.47	80-86	0.44	86-93	-0.20	80-93	0.05
Paraguay (to 92)	3.34	70-81	-2.04	81-86	1.87	86-92	0.37	81-92	1.63
Honduras	-1.36	70-79	-0.85	79-90	0.55	90-93	-0.31	79-89	-0.70
Bolivia (to 91)	1.87	70-78	-1.10	78-86	-1.20	86-91	-0.88	78-91	-0.28
group average	0.83		-0.96		0.40		0.09		0.26
both groups	0.76		-1.57		1.45		-0.06		0.10
Brazil	1.78	70-80	0.48	80-93**		**	0.48	80-93**	1.32
Haiti (to 89)	0.05	70-80	-2.23	80-89**		**	-2.23	80-89**	-1.21
Nicaragua	1.55	70-77	-5.22	77-93**		**	-5.22	77-93**	-4.00
Jamaica(to 91)	-1.18	70-85		**	-0.01	85-91**	-0.01	85-91**	-0.90
Chile	1.56	70-81	-3.50	81-83	4.78	83-93	4.10	81-93	2.48

Table 6. Agricultural value added per rural population (estimated annual growth rate, constant local currency)

	1. Early growth		2. Recession		3. Late growth		Periods 2&3		All years
Rapid late growth	rate	year	rate	year	rate	year	rate	year	rate
Peru	-1.41	70-81	0.63	81-92	6.16	92-93	0.47	81-93	0.09
Argentina	3.30	70-80	1.63	80-90	2.53	90-93	1.88	80-93	2.44
Belize	4.28	70-80	-0.44	80-85	2.67	85-93	0.90	80-93	2.23
El Salvador	5.14	70-78	0.71	78-89	1.71	89-93	1.24	78-93	2.06
Dominican Republic	1.25	70-83	2.78	83-91	4.08	91-93	3.03	83-93	1.97
Costa Rica	4.17	70-79	0.73	79-85	4.36	85-93	2.96	79-93	2.69
Uruguay	1.99	70-81	-2.34	81-84	3.18	84-93	1.69	81-93	2.20
group average	2.67		0.53		3.53		1.74		1.95
Slow late growth									
Colombia	3.12	70-80	1.11	80-85	4.62	85-93	3.83	80-93	3.09
Ecuador	2.01	70-81	3.16	81-89	5.38	89-93	4.09	81-93	2.66
Mexico	3.44	70-81	0.63	81-88	3.01	88-93	0.85	81-93	2.10
Venezuela	4.12	70-77	3.35	77-85	4.36	85-93	4.47	77-93	4.36
Guatemala	0.93	70-80	0.69	80-86	1.67	86-93	1.20	80-93	0.98
Paraguay	2.02	70-81	1.13	81-86	1.27	86-93	1.57	81-93	2.10
Honduras	-1.30	70-79	-0.15	79-90	-0.41	90-93	0.26	79-93	-0.12
Bolivia	2.42	70-78	-0.24	78-86	3.42	86-93	1.87	78-93	1.35
group average	2.09		1.21		2.91		2.27		2.06
all countries	2.36		0.89		3.20		2.02		2.01
Brazil	5.22	70-80	3.61	80-93**		**	3.61	80-93**	4.22
Haiti	0.44	70-80	-1.91	80-93**		**	-1.91	80-93	-0.59
Nicaragua	1.64	70-77	-2.33	77-93**		**	-2.33	77-93**	-1.67
Jamaica	0.24	70-85	2.47	85-93**		**	2.47	85-93**	0.92
Chile	4.62	70-81	-3.29	81-83	5.62	83-93	4.64	81-93	4.36

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