RURAL PROSPERITY IN THE LATIN AMERICAN AND CARIBBEAN REGION

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Authors and Methodology

This paper was written by Clemence Weber with David Franklin, Eugenio Bonilla Diaz, David Bathrick, Clarence Zuvekas, and Douglas Southgate as contributing authors. Each contributing author produced first a stand-alone essay on a specific sub-topic. These essays were then summarized and incorporated into the main body of this text by Clemence Weber. The complete essays are attached as separate annexes to this paper.

The body of this paper is based on and draws heavily from two USAID/LAC Bureau documents: USAID's "Rethinking the Rural Economy," concept paper prepared by Jolyne Sanjak, and "LAC 2001 Trends Analysis: Economic Growth Goal Areas," prepared by Roberta VanHaeften. The LAC Bureau, in particular, Jolyne Sanjak, provided extensive comments and insights to the paper. This paper is the product of a close collaborative partnership between the USAID/LAC Bureau and its various authors.

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RURAL PROSPERITY IN THE LATIN AMERICAN AND CARIBBEAN REGION

Abstract

The United States has a strong interest in seeing economic growth and rising living standards in the nations of Latin America and the Caribbean (LAC). As LAC produces more products for our consumers, we also expand our exports in the region. Ignoring LAC's poor— less visible perhaps than the poor in Africa and Asia but just as hungry and vulnerable — is risky for the stability of our region. Political instability, in turn, creates risk of backsliding on progress toward democratic market economies, thus dampening opportunities for U.S. direct investment. Helping the countries of LAC to achieve full participation in global and regional trade and to ensure widespread benefits is an important means for advancing U.S. interests. LAC leaders favor the FTAA; they are also concerned with the social and political costs of persistent poverty. This present convergence of interests and LAC's unique mix of development progress and problems creates special opportunities for international cooperation to support demand-driven rural growth through increased trade capacity, competitiveness, and broadened access to knowledge and other productive assets. USAID, with its partners, can assist countries to close governance and knowledge gaps that, like a double-edged sword, impact both competitiveness of nations and the livelihoods of the more than 80 million of our neighbors who live in abysmal conditions.

I. Introduction

The Latin American and Caribbean (LAC) Bureau of USAID recognizes that it is time to rethink and refocus its strategic approach for rural economic development to impact more effectively on poverty and expand rural prosperity. **This document suggests a framework and guidelines intended to assist the Bureau and Missions in developing "new-era" approaches to attack this complex problem. It is not a strategy. It might best be described as the framework for a process of getting the priorities right.** Rather than an attempt to provide the answers, it aims to identify the "right" questions, to better define the problem, and to identify approaches that work in certain settings and some that do not under any circumstances.

Helping the nations of Latin America and the Caribbean (LAC) achieve full participation in global and regional trade and ensure a wide distribution of its benefits — and thereby reduce the incidence of poverty — is an important means for advancing U.S. interests. As LAC economies grow and increase trade with U.S. and other markets, U.S. exports to the region will continue to expand. Conversely, without broad-based economic growth, LAC's poor will remain hungry and vulnerable, creating risks of political instability and backsliding on several decades of progress toward achieving democratic market economies.

Overall, the absolute number of poor in the LAC region is increasing and rural poverty remains a very serious problem, a "huge wastage of human resources, a frequent source of political destabilization and a cause of environmental pressures" (de Janvry and Sadoulet 2000). Unfortunately, despite some major accomplishments and many lessons learned, the overall record of rural development efforts including those of USAID, in dealing with rural poverty, is generally disappointing. The reduction in the relative number of rural-to-urban poor over the past 30 years has been insufficient and a reflection of rural to urban migration, not successful rural poverty reduction. It is time to rethink the approach to the problem and revise it, building from past lessons — both positive and negative — and incorporating new methodologies that fit the current and emerging realities.

The main purpose of this paper is to respond to the LAC Bureau's need to find ways to scale up and complement current efforts and better support attainment of Agency objectives to reduce poverty, hunger, and conflict while fostering broad-based economic growth and integration. A secondary purpose is to address the contention that agriculture is not being given the role it merits in economic growth and poverty reduction initiatives and suggest ways to more fully realize its potential to contribute to these objectives. The need for these initiatives exist because LAC strategic approaches in agriculture and economic growth have not kept pace with the needs of evolving economies, opportunities, and other elements of the development setting. Add to this the anticipated, far-reaching impact of FTAA, WTO, and Summit of the Americas initiatives on the development context, and the urgent need for new approaches becomes clear. In response, this paper provides discussion pointing to an overarching framework for USAID assistance in LAC that embraces trade-led economic growth while effectively addressing the roles of both agriculture and the non-farm rural economy in the context of globalization and near-term, free trade challenges and opportunities.

The core of this paper is the identification and discussion of issues that contribute to pervasive poverty in LAC and of old and new methods of addressing them. Based on our views and experiences with what works and what does not, combined with a review of the current literature, we put forward a set of conclusions ranging from broad parameters of the approach to specific good practice principles. Taken together, the intent is to provide an overarching framework with guidelines to consider when developing strategic approaches, programs, and activities to promote rural prosperity and reduce poverty in the LAC region.

The framework is intentionally broad, reflecting the multifaceted nature of poverty and the complex process of promoting widespread prosperity, and recognizes the importance of actions beyond the scope of our economic growth and agricultural programs. **While calling for a scaling up of promising programs, it reinforces the need to selectively choose a package of activities with attention to how they affect the broader dynamic of growth with poverty reduction.** It reinforces the need for creativity and effective partnering. The need for partnerships applies across strategic objective teams — environment, education, health, and democratic government — and in work with other donors with resources that can complement our own, especially in areas like infrastructure, property, and rural finance, which are harder to fit within the scope of our assistance.

The rest of the paper is structured as follows: Section II describes poverty in LAC, the factors influencing it, and its relation to conflict. Alternative paths out of poverty, the role of agriculture, and the evolving development setting and its impact on poverty are also discussed in this section, along with the rationale for changing strategic approach. The discussion of poverty tries to give enough depth to help the reader understand how the framework proposed later in the paper, while not directly targeting poverty, effectively targets the dynamics that are keeping poverty so pervasive in the region. Again, poverty is multifaceted and its relation to growth is complex.

In Section III, a framework for addressing poverty in LAC is presented including a broad statement of strategy, a detailed description of key action areas (potential interventions and investments), a statement of overarching approaches to implementation as well as more specific guiding principles, examples and conclusions. These include identification of needs and

opportunities for collaborative programmatic and operational linkages within USAID, specifically to include Democratic Governance (DG), and with others involved in promoting growth in the rural economy and poverty reduction and alleviation in the LAC region. Text boxes are included herein to share contemporary experiences and lessons learned on surmounting difficult challenges to helping the poor escape poverty. These examine approaches that have worked, illustrating activities that serve as potential examples for promoting rural prosperity. Finally, Section V summarizes key precepts and conclusions that provide a foundation for rethinking approaches to building rural economies and reducing poverty in LAC.

II. Background

A. Setting and Rationale

The Western Hemisphere is at a juncture where it can choose to live with the consequences of increasing numbers living in poverty or take advantage of the current potential for high compatibility between trade and aid to reduce poverty. Many countries of the region have serious stability issues that tend to emanate from rural areas where a high percentage of the population is poor in spite of long standing development efforts. These problems are currently compounded by the coffee crisis and other recent negative shocks that thwart poverty reduction efforts and have the potential to pull significant numbers back into poverty. Unless rural economies grow, the trend of increasing absolute numbers living in poverty in the LAC region seems certain to continue, accompanied by hunger and conflict.

The bright side to this story is there is good reason for the emerging consensus that *enhancing rural livelihoods is the way to unleash inclusive growth in the region.* All governments in the hemisphere except one are democratically elected and development is being collectively pursued through the Summit of the Americas process. The new momentum toward freer and fairer trade supported with the FTAA, WTO and other initiatives coincides with a growing demand for agricultural products and other products, especially in the aging capital-, technology-, and service-intensive economies of the north. Also, the LAC region has a current comparative advantage in such products given their labor, natural resource endowments, location, and the competitive changes associated with globalization. With market windows of opportunity now available to USAID-assisted countries, the stage is set to significantly expand demand-driven rural growth through strategic interventions in trade capacity, competitiveness, and broadened access to markets to reduce poverty with greater effectiveness than in the past. It is certainly opportune to think anew about ways to revitalize rural economies.

B. Poverty in LAC

“We venture the opinion that an important reason why the policy record has been lacking is because the causes and dynamics of poverty have been much misunderstood" (de Janvry and Sadoulet 2000).

Extent, Degree, and Location of Poverty - The absolute number of poor in the LAC Region is increasing. The World Bank indicates that by the mid-1990s, “1 person in every 3 was poor and 1 in every 6 was extremely poor” (IBRD 2001). The poorest quintile of LAC’s population consumes only 80 percent of the minimal nutrition requirement — strikingly comparable to

figures for sub-Saharan Africa and South Asia (Pinstrup-Andersen and Babinard 2001). USAID food security reports are also alarming: in Guatemala, 42 percent of children under the age of five suffer from chronic malnutrition. While poverty in the LAC region has become more of an urban problem, with roughly two-thirds of the poor living in urban areas, persons living in rural areas are still twice as likely to be poor than urban residents. Furthermore, over half of the malnourished and food-insecure live in rural areas — in other words, the extremely poor are predominantly rural.

Rural Poverty Is Multidimensional - Income is an important dimension of welfare and indicator of poverty, but poverty has other dimensions. Other elements include: the basic needs of food, clean water, health, education, and housing; employment satisfaction; empowerment; community relations; legal and human rights; and political freedoms (World Bank 2000). Poverty in basic needs compounds income poverty and the degree of satisfaction of basic needs in rural areas is generally a fraction of that found in urban areas. In the LAC region in 2000, access to potable water, improved sanitation, and education were much lower in rural areas compared to urban areas. Food insecurity remains a large problem in the LAC region and lack of economic access — in other words, poverty — is the root cause of food insecurity in LAC. Over half of all children in rural areas of Guatemala are chronically malnourished, compared to less than one-third of children in urban areas and in Peru the prevalence of chronic malnutrition in rural areas is three times greater than it is in urban areas.

Roots and Correlates of Poverty - Poverty is usually defined as the *lack* of one or more of a number of things of value and is the result of a number of complex, interacting, value-producing processes, with the complexity of interactions often making it difficult to distinguish between cause and effect. To more readily identify the key factors influencing poverty, these processes are defined here simply to be functions of **assets** (resources, including services) and **the enabling environment**, made up of opportunities and adversities. Even with simple definitions, it can be argued whether an influencing factor is part of the enabling environment, an asset, or both. In reality, what a particular factor is defined as or in what category it is placed, matters little here. What does matter is the complexity of their roles and the interactions among them, the existence of many cross-cutting themes and issues, and, how these impact on the rural economy and the rural poor. Some thoughts follow.

Access to a wide array of assets strongly influences household income through their ability to participate in markets. Poor rural households are highly heterogeneous in their access to such assets. Households in poverty are those with low endowments and weak ability to access all assets. Because of the heterogeneity of asset positions and substitution effects in income generation among assets, there is the potential for numerous alternative paths out of poverty by altering access to assets (de Janvry and Sadoulet 2000). Assets are categorized and discussed in more detail later.

Among factors determining the enabling environment and its effects on returns to assets, and therefore on poverty, the following are considered the most influential: income inequality, markets, governance, technology and information, location or regional context, economic growth, gender, ethnicity, and external shocks.

Income inequality - Front and center with low growth and high incidence of rural poverty is LAC's income distribution, more skewed than any other region in the world. Despite relatively high income levels compared to other developing regions, the highly unequal distribution of income between sectors and within the rural sector results in high incidences of rural poverty. The relationship of globalization and income inequality is a much-debated point. However, income inequality existed in LAC long before globalization. It is a manifestation of inequitable access to assets and opportunities, not globalization. Whatever its cause, the important point is that LAC's high level of income inequality reduces the impact of economic growth on poverty reduction – and, possibly acts as a drag on growth itself.

Markets. Unless there is a market for what poor households can produce — and the poor can access it — opportunities to escape poverty are extremely limited. Yet, a market can present either opportunity or adversity for a household, a la the coffee crisis.

Governance. The influence of governance on poverty is strong, principally through its impact on access to assets and markets in either absolute or relative terms, such as through its direct and indirect effects on transaction costs. Governance is also a major determinant of whether the enabling environment presents opportunity or adversity for those in poverty.

Science and technology. Technology affects poverty through influences on the enabling environment, creating or eliminating opportunities for the poor with effects on transaction costs in the product and factor markets and on the productivity of assets.

Regional context. Location and the corresponding regional context influence poverty through unequal opportunities across regions to asset endowments and their use to generate income — that is, due to the effects of differences in the enabling environment.

Gender and poverty. There is no hard evidence that women are disproportionately poor, but poor women have more difficulty in accessing measures that reduce poverty. Yet, the growing contribution of women to family income has provided an increasing number of rural households relief from poverty and should receive appropriate attention in programs to reduce poverty.

*Ethnicity and poverty***.** Ethnicity and poverty are highly correlated in the region, with 80 percent of the region's indigenous population living below the poverty line. Indigenous people have lacked equitable access to land, credit, infrastructure and technology, and other knowledge sources and services (Echeverría 1998).

Economic growth. Sustained economic growth is essential for both poverty reduction and social and political stability in the LAC region. **Notwithstanding the income inequalities noted above, we must move past simple arguments on whether we should focus on making the pie bigger or on dividing it more equally. Clearly *both* are necessary.**

External shocks. The countries of LAC remain vulnerable to natural disasters (hurricanes Georges and Mitch) and external shocks (the coffee crisis) that retard growth and contribute to poverty. It seems the poor — especially the rural poor — must struggle to obtain a fair share of economic benefits, but trouble finds them with ease. In truth, it is the lack of assets and poor

access to opportunities that make the poor so vulnerable. Measures to help protect the poor from such shocks and assist in recovery can play a major role in reducing poverty in the LAC region.

C. Paths Out of Poverty

Multiple Pathways to Prosperity - In their review of the status and determinants of rural poverty in Latin America, de Janvry and Sadoulet (2000) describe four basic potential paths out of poverty as summarized below.

An *exit path* is defined as rural-to-urban migration. Historically, migration has been the dominant factor in reducing rural poverty in Latin America and increasingly includes migration to the United States. More needs to be done to optimize the economic and social impact of these transitions. An *agricultural path* out of poverty exists for households with sufficient access to land and that benefit from favorable market, institutional, public-goods, and policy conditions, that allow for profitable use of these assets. This is the path that traditional agricultural and rural-development approaches have taken with mixed success. However, by adapting interventions to take advantage of new era, trade-related opportunities and markets, this path can serve much larger numbers of the region's rural poor. The income strategy of most rural households in the LAC region is one that combines cultivation of a small plot of land with off-farm sources of income. This is the *pluri-active* or multiple activity path out of poverty. Until recently, most scholars had systematically ignored it. Today, most agricultural and rural-development practitioners, together with policy makers, either continue to ignore it or do not give it adequate attention. Finally, there is the *assistance path*, the only hope for escaping poverty for those households that cannot make it on their own. The challenge here is identifying, targeting, and transferring the right type and level of assistance (one-time transfer, sustained welfare or safety nets) to help households on this path escape poverty.

The Role of Agriculture and Off-Farm Opportunities - Increases in agricultural production and productivity are strategically important to national economies because of its greater linkages and associated income and employment multipliers than are found in the rest of the economy. More importantly, much of the spending associated with increased incomes and multiplier effects takes place in rural settings, providing additional opportunities for the economic integration of the poor and increasing the potential for sustained poverty reduction. With opportunities to increase agricultural exports in conjunction with further trade liberalization under the WTO and the expected adoption of the FTAA, agriculture has the potential to play an even greater role in the economic growth of the region. Indeed, the question is not *if*, but *how* new-era agriculture can stimulate economic growth. The challenge will be to take advantage of the opportunities presented by globalization and free trade by making the sector more competitive, while also reducing poverty and protecting environmental assets.

The magnitude of the role of off-farm income opportunities among the rural poor has only recently been more broadly recognized. There is strong evidence that off-farm, particularly non-farm opportunities, should receive far more attention than they do. By the second half of the 1990s, rural off-farm income represented more than 40 percent of the total income of rural households in the vast majority of countries studied. As mentioned above, heterogeneous access to assets and variations in the enabling environment have resulted in income-earning strategies that are highly diverse across regions and households. Yet, the relationship (linkages) between

FIVE MYTHS REGARDING RURAL NON-FARM INCOME

New research (Reardon, Berdegue and Escobar [2000] and Escobar, Reardon and Berdegue [2002]) based on field survey data from the 1990s, explodes several traditional images we call myths about rural employment and rural nonfarm income (RNFI). Following are the five main myths and the facts that contradict them and the implications they have for practical work in rural development.

Myth 1: "Rural households live nearly exclusively from farm incomes." False. On average, rural households in Latin America earn **40%** of their incomes from RNFI. (This share does not vary much over countries or regions and is not correlated with GNP/capita.) Moreover, RNF employment grew much faster than the (stagnant) farm wage-employment over the past three decades. *Compare these facts with the relative neglect of RNF employment in rural development programs in the continent. The upshot is the need to increase RNF employment promotion in rural development projects. .*

Myth 2: "When rural households work outside their own farms, they mainly do so as migrant laborers or as local farmworkers." Both false. On average, local RNFI is 5-10 times greater in volume than migration or farm wage employment earnings. Only in a few pockets in Mexico and Central America does migration income even come close to local RNFI (and it is still less important). Moreover, both migration and farm wage income are quite concentrated in a small subset of households, international migration income in the relatively rich, and farm wage income in the relatively poor households, due to the difference in asset requirements between the two types of employment. *The upshot is that programs seeking to help and encourage savings and investment in rural areas should focus at least as much on those earning RNFI as they now do on those earning migration remittances. Moreover, employment programs that are currently designed mainly with farm sector employment in mind have to be re-oriented to promote nonfarm employment as well, because there is a far greater potential in that domain.*

Myth 3: "Most RNF employment is in self-employment (microenterprises) and in the manufactures sector." Both false. In many if not most rural areas of Latin America, wage employment in the services sector is at least as important and is often more important than self-employment in manufactures. *Contrast that fact with the overwhelming concentration of development projects on MSEs engaged in manufactures. The upshot is that programs should devote at least equal resources to helping the poor participate in wage employment in the services sector.*

Myth 4: "Nonfarm employment is most important where farming is poor and among poor farmers." Both false. Nonfarm employment booms in dynamic agricultural areas, where there are growing farm incomes to create effective demand for nonfarm goods and services, and a booming farm sector offers opportunities in manufactures and services in upstream and downstream linkage activities, such as input provision and crop processing. By contrast, in areas with low-productivity risky agriculture, RNFI may be a high share of incomes but the aggregate volume is low and the average RNF job pays poorly. Moreover, households with more land and/or education tend to get the lion's share of remunerative nonfarm employment. The poor tend to depend on the poorly paying (but easy entry) nonfarm jobs –the nonfarm equivalent of subsistence agriculture. Myth 4 points to a key paradox facing rural development program designers. The first is that the incentives facing poor households or poor zones to seek nonfarm employment are high, but their capacity to undertake remunerative RNF activity is low due to lack of education, access to infrastructure, start-up funds, and other assets. *The upshot is that projects/programs need to take very different approaches in helping the poor in dynamic zones versus helping households in poor zones participate in remunerative nonfarm employment. In both cases there needs to be a focus on identifying the bottlenecks in a given RNF supply chain and the asset needs of poor households to participate in the activity.*

Myth 5: "Rural nonfarm entrepreneurs in Latin America are relatively isolated from national and international market forces and are not in direct and daily competition with urban and foreign firms producing manufactures and services." This used to be true about a decade or two ago, but now is fast becoming false in much of rural Latin America. Liberalization of imports, improvements in rural roads, rapid urbanization, and the rapid expansion of supermarkets into intermediate cities and even into rural towns in much of Latin America (Reardon and Berdegue, 2002) are exposing rural nonfarm entrepreneurs to rivers of goods and services coming from urban and foreign competitors. It also means that for many entrepreneurs to compete and survive, they need to be able to sell not just in local rural markets with little effective demand, but in competitive urban markets.

increases in agricultural income and off-farm opportunities is rarely given the importance it deserves in generating rural prosperity. **Clearly, agriculture production and off-farm opportunities are complementary and not competing.** Efforts to generate rural prosperity and reduce poverty should include both in proportion to the potential afforded by the particular setting of assets and the enabling environment, and opportunities to alter these.

Economic Growth and Poverty Reduction - Rural poverty responds to aggregate income growth as well as income shocks. No doubt, economic growth is key to poverty reduction and social and political stability in the LAC Region. However, even when countries experience impressive and consistent growth, poverty, especially rural poverty, can remain persistent and intractable. If left to the markets, economic growth alone will not have the desired impact on poverty reduction. Where rapid growth has occurred with a poverty-reduction impact, the enabling environments and conditions with respect to access to assets were much more pro-poor than those currently present in the LAC Region. To illustrate, it is estimated that, to double the income of the poorest 20 percent of Hondurans under the existing enabling environment, GDP must grow at about 6 percent a year over the next 25 years. However, by altering the enabling environment, empowering the poor, and improving access to assets, this time could be cut by about one-third (Cotler, Llona and Tomba 2000). For growth to be broadly based, it must be accompanied by interventions that counter market failures by promoting equality of opportunity and targeting the poor — that is, interventions that support *pro-poor growth*.

Sustainable Market Access Generates Jobs

The Center for Agribusiness Development (CDA) is an USAID/Honduras project to help non-traditional agricultural producers, processors and exporters to expand their production and marketing capability. The project has created sustainable incomes for small and medium farmers by promoting market driven demand for a number of horticultural crops. The project, working through 241 “lead farmers” to reach over 2,300 small producers, has had several successful sales. These include: jalapenos, with five million pounds of peppers delivered on fixed price subcontracts resulting in sales of $846,000 for 69 small and medium sized growers; melon balls, generating $300,000 in sales, and frozen organic papaya and pineapple, generating $250,000 in sales. As a result of this project, 300 permanent and 3000 temporary positions have been created.

D. Evolution of the Development Context

Changes in Approaches - Over the past three decades, development approaches and programs have changed and evolved, at times as a knee-jerk response to the political needs of donors, sometimes because previous approaches had failed and there was a need to try something new — and, occasionally, because a better way had been found. To highlight lessons learned, a brief overview of this evolution, based largely on Robert Burke's description of four approaches follows (Burke 2001).

Under what can be termed the *technofix* approach, practitioners attempted to expand the Green Revolution with the perception that research and extension focused on a few basic food crops, could significantly reduce rural poverty. The problem with *technofix* was that by ignoring the enabling environment it failed to correctly identify the cause of rural poverty and the role of agriculture in generating income for poor people, important lessons learned.

Integrated rural development (IRD evolved in reaction to the lack of success of *technofix* and attempted to attack a broad range of constraints, but was short lived due to its high cost per

beneficiary. The major lesson learned from this experience was the importance of infrastructure, the cost of which precluded its widespread application and led to its demise. The other deathblow was public-sector involvement. Governments selected who, what, when, and how, and, more often than not, got it wrong — another lesson learned.

The third generation of approaches is described *as the magic of the market place, or get the price right first and all good things will follow*. This structural reform approach emphasized the importance of the macroeconomic environment and need for adequate incentives. In retrospect, this approach over emphasized what governments should *not* do and paid too little attention to what they *should* do. Some also believe this approach placed too much emphasis on the macro (wholesale or systemic) interventions and too little on transactional (retail) interventions. Perhaps the most important lesson from this approach was the recognition that leveraging economic growth to reduce rural poverty in a few years depended on a favorable enabling environment.

The most recent strategy, *growth will take care of itself and we have to deal with those left behind*, places great faith in the effectiveness of markets in guaranteeing economic growth. It focuses on retail programs that provide direct help to the poor — for example, microenterprise lending — without engaging often in complementary policy/institutional interventions. Like integrated rural development, the high cost-per-beneficiary of this approach has been a serious drawback as USAID's budget for poverty reduction activities has gotten smaller.

Systemic versus transactional - There continues to be debate over whether a systemic, across-the-board-approach, or a transactional approach that addresses specific perceived concerns is best. As posed, this question presents a false dichotomy. In the final analysis, the policy agenda must reflect real, perceived concerns. The question really becomes an operational issue of how to attack them, individually or generically. To illustrate, if a particular regulation stands in the way of entering foreign markets, does one wage war on the commercial code or attack the particular regulation? In many instances, it is analogous to the debate over making the pie bigger or dividing it more equally…one is likely to find both types of approaches necessary depending on the policy issue being addressed and the nature of the operational environment. These will determine the feasibility of alternative approaches. Feasibility in this case includes economic, financial, social/cultural and political feasibility. In some instances, interventions may need to be sequenced. For example, if insecurity of land tenure acts as a brake on the development of a defined area, one regularizes titles in that area, not nationally, but to make this possible a national laws or regulations may need to be changed first.

Donor Programs and Investments - Parallel with changing approaches, there were shifts in program focus and investment magnitude. In the era of *technofix*, donor investments in agriculture grew to predominant levels and remained high during the *IRD* era. Under pressure to prioritize macroeconomic reform and privatization (i.e., the *magic of the market place* approach) and reduce public debt, LAC countries began to cut public-sector support for agricultural and rural development. Politicians, impatient with the long time horizon for impact from agricultural investments, encouraged investments with more visible and immediate effect. Finally, under the *"growth will take care of itself approach*" new priorities emerged like democracy building and protecting the environment which were important to development as well as to constituents at home. Assistance to agriculture dried up rapidly in comparison to assistance to other sectors and

development themes. Today, such investments have fallen to their lowest levels in 30 years. The decline in overall assistance to the region during the 1980s and 1990s was accompanied by a more-than-proportionate decline in USAID investment in agriculture and the rural sector.

Government, Political Voice, Protectionism, and Globalization - Structural reform drastically changed the role of the government, leading to extensive reductions in state interventions in matters affecting rural economies, as well as the dismantling of many institutions traditionally responsible for the rural sector. The withdrawal of public-sector services left many rural inhabitants with few opportunities to improve human capital through education and health services, and without the means to meet credit and infrastructure needs (Echeverría 1988). This situation has been exacerbated by an urban bias in the distribution in population, education and income, that has rendered the political voice of the rural poor ineffective in decision making.

Another trend has been the shift from closed, inward-looking economies to more open, outward-looking economies. This shift from **protectionism to globalization**, with new trade regimes coming into effect, has brought unprecedented changes for rural economies in at least two major ways. On the positive side, it provides opportunities to employ existing comparative advantages in accessing new markets. On the other hand, it has exposed previously protected rural producers to a barrage of new competition.

Why Change the Strategic Approach Again Now? - As a prelude to the ensuing discussions of factors to consider in the development of a "new-era" strategic approach, we summarize from the above the reasons a new approach is called for and why now:

- Rural poverty is a serious problem in most USAID-assisted LAC countries.
- The costs of continuing the status quo are high for the United States as well as for assisted countries, and not only in terms of lost economic opportunities. Without change, rural poverty is likely to worsen sharply, foment conflict, threaten democratic rule, and lead to accelerated environmental degradation.
- Past approaches are inadequate because they have not focused sufficiently on eliminating the fundamental causes of poverty: an unfavorable enabling environment and inadequate assets.
- Better methods of targeting are needed to deal with the extreme income, ethnic and gender inequalities characteristic of the LAC region.
- To respond to globalization and free-trade initiatives, a new approach is needed to assist countries exploit comparative advantages and increase competitiveness, to provide new opportunities and alternatives for producers of basic crops and other "protected" areas of production that harbor the poor.

III. Future Directions

A. Overview

USAID's strategy in the LAC region should aim for assistance that will bring both impact in the near term on hunger and political stability and, in the longer term, generate sustainable growth that engenders poverty alleviation. The East Asian countries were smart when they embarked on export-led growth to also invest in agriculture and inclusiveness measures such as land titling,

rural health, and education. A sensible orientation for LAC economic growth programs emerges: to deepen the commitment to trade-led growth (trade capacity building and economic policy reforms), to strengthen the competitiveness of enterprise, and to stimulate broader access to productive resources, with an emphasis on the rural sector. Within this orientation, a livelihoods focus is needed to ensure that impact reaches the poor. Livelihoods are created from producing goods and services for markets. Livelihoods are constrained when government dampens market opportunity and when constraints on access to technology, information, and productive resources limit participation in markets.

Given the demand-driven dynamic of market-based growth and the multifaceted nature of participation in competitive markets and of livelihood improvement, four key needs areas are: *rules of trade and market access; science and technology; access to assets;* and *vulnerability management* (environmental and economic risks). Furthermore, it is essential to undertake a set of cross-cutting *economic governance* actions. Each of these is defined and explored below so that our choices for selection, sequencing, and packaging of actions across these elements will be grounded in a review of literature and field experience.

These action areas are not new in and of themselves as we often look to our past to guide our future. Before exploring these action areas in more detail, below we summarize what is new and different about this new framework:

- First, as described above, the economic setting is much improved. Markets are stronger as the legacy of import substitution industrialization fades away. Strong regional trading blocks have emerged and are facilitating intra-regional commerce. With the FTAA clearly on the horizon, intra-hemispheric commerce will also expand.

- Second, unlike past approaches that focused on production, the new framework views market-driven rural enterprise as a source of income.

- Third, the framework recognizes that the rural economy, with its complex linkages to markets — local to global — implies a need to invest in a variety of activities that cross the four action areas outlined above. Yet, the vision herein is not a call for the return of integrated rural development based on large-scale, supply-driven and state-managed programs that are expensive and ineffective.

- Fourth, the framework favors investments that link the poor with the non-poor through public and private action.

- Finally, the strategy clearly addresses the role of government as a facilitator of commerce, not a direct participant. USAID has often strongly advocated what government should not do to allow the incentive structure of prices to work. Often less emphasized were the essential governance functions needed to facilitate trade and expand market participation — "economic governance." Economic governance is therefore included in the framework as a cross-cutting agenda.

B. The Cross-cutting Agenda and Key Needs Areas

The proposed new approach to expand rural prosperity is based on the cross-cutting agenda of *economic governance* and four demand-driven needs areas: *rules of trade and market access, science and technology*, *access to assets*, and *vulnerability management* (environmental and economic risks). These five topics are discussed in sequence below.

1. Economic Governance: A Cross-cutting Agenda[1]

a. The Concept of Economic Governance

Economic governance is a concept in search of a clear, widely accepted definition. In USAID/LAC's "Rethinking the Rural Economy in LAC," economic governance is "the enabling environment within which the economy functions [It] implies the need to ensure stable, transparent and predictable rules and regulations that encourage competition and equitable access to public services." For USAID/LAC advisor Kerry Byrnes, the term refers to "those parts of a country's public sector and private sector institutional structure that exert a determining or guiding influence in or over how individuals, enterprises and/or countries carry out economic and commercial transactions." Some economists, writing from an institutionalist perspective, address such narrow issues as property rights, contracts, regulation, corruption, and fiscal management. Others, as illustrated by the quotations in Annex V, take a broader, but still largely microeconomic view.

In examining the enabling environment for decisions affecting rural prosperity, an even broader definition of economic governance is appropriate. Macroeconomic policies deserve more attention, because a) overall economic growth is the best way to reduce poverty in the long run, and b) macroeconomic policies (especially exchange-rate and trade policies) affect incentives for agricultural production more than sector-specific policies. Regulatory issues should include situations of market failure and those where market-size limitations preclude the establishment of a sufficient number of firms to ensure competitive behavior. The focus on corruption should be broadened to include other criminal activity against persons and property that adds to business costs and thus reduces competitiveness. Decisions regarding the allocation of public expenditures on infrastructure and rural services will determine how broad-based the process of rural development will be. Finally, economic governance should encompass social policy, since human capital is a key asset needed by the rural poor to escape poverty.

b. Economic Governance, Democracy, Growth, Poverty, and Conflict

The interrelationships among economic and political variables in the process of development are complex and not subject to neat generalizations. Research on the relationship between democracy and economic growth has produced ambiguous results. Also, economic growth is no guarantee that conflict will be avoided, as is clear from the examples of Iran and several Central American countries in the 1960s and 1970s. Nevertheless, compelling evidence exists that economic performance has a broad, positive relationship to economic governance. And despite widespread criticism of econometric studies linking external trade with economic growth, other

[1] Clarence Zuvekas, Jr. prepared this summary on economic governance as well as the complete version attached as Annex V. References cited in this section are listed in that annex.

evidence suggests that trade is good for economic growth. While economic growth clearly reduces the incidence of poverty, its effects are weaker in countries with highly unequal distributions of income (like most of Latin America) than in those with less inequality. Actions to strengthen participatory democracy should have positive effects on both the climate for private investment and the quality of public administration. Such actions include measures to:

- Strengthen property rights, lower the costs of dispute settlement, and reduce the likelihood of arbitrary application of laws
- Reduce criminal activity, which raises costs to businesses
- Decentralize government programs, and, ideally, their financing
- Give nongovernmental organizations greater scope for administering social service and environmental programs and allow other civil-society groups to play watchdog roles
- Achieve legal and de facto equality of opportunity for women and minority groups
- Permit greater freedom of association

c. Interrelationships

The quality of economic governance has numerous direct and indirect effects on other action areas. Good economic governance requires a major reallocation of public expenditures, both between and within sectors, to target poor rural households more directly and effectively. Broad examples of desirable reallocations, by area, include:

- *Rules of trade and market access*. Stronger programs (focusing on both poverty alleviation and, especially, on poverty reduction) to help small farmers affected adversely by trade liberalization; measures to bring microfinance institutions into the regulatory framework; and targeted investments in public infrastructure and services in areas where the incidence of poverty is high but agricultural and other economic potential is good
- *Science and technology*. Targeted investments in rural electrification and irrigation; agricultural research and extension services better targeted to small farmers and the crops they can market
- *Access to assets*. Investments in human-capital formation, especially education and training; better access to credit and infrastructure; and improved land-title security
- *Vulnerability management*. A coherent strategy for disaster prevention and mitigation, with a legal and institutional framework based on strong local

participation; actions to stimulate investment and job creation in non-agricultural activities

d. Roles of the Public and Private Sectors

The public and private sectors have a variety of roles to carry out with respect to economic governance. Some are distinct, while others overlap and are shared or best carried out cooperatively. These roles are described below.

Macroeconomic policies. The public sector has a major responsibility for macroeconomic policy. It needs to ensure that sound policies are maintained fairly consistently over at least three to four years to give private investors confidence that sound economic management will be sustained. Moreover, giving the poor equitable access to productive assets requires adequate fiscal revenues.

Other public sector actions. Other public sector governance activities include stimulating private sector investment, promoting competitive behavior and protecting consumers, providing equitable access to public services, and strengthening social policies. Specific actions under each of these categories are listed below (this list is exhaustive and the specific items in need of attention will vary a lot by country – an assessment should be made using this as a checklist).

Stimulating Private Investment:

- Reducing the costs and time required for establishing businesses
- Providing adequate protection of physical and intellectual property rights
- Preserving the integrity of the financial system through vigorous application of international (Basle) standards of financial regulation
- Providing a legal framework to facilitate formal savings (and therefore investment) by poor people
- Establishing and providing highly trained and motivated staff for "one-stop" windows for potential foreign investors

Promoting Effective Economic Governance in both the Public and Private Sector in Honduras
USAID/Honduras' Policy Enhancement and Productivity (PEP) Project is unique in that it is working at both the macro- and micro-economic level to establish a viable economic framework to promote strong economic governance and productivity in Honduras. For example, since PEP's inception in 1999, the project has worked closely with the Central Bank of Honduras to provide technical support in the creation of sound monetary policies and instruments designed to decrease lending interest rates in Honduras. As a result, average lending rates have been reduced from almost 30 percent to about 20 percent. In turn, firms with which PEP has been working at the secondary city level are now able to secure working capital loans at a lower cost. PEP has also, through the establishment of local competitiveness committees, been able to train them to be effective policy advocates. Recently, an investor wanted to place a manufacturing firm in Danli but lack sufficient telephone lines. The competitiveness committee was able to persuade HONDUTEL to bring in 1,200 new telephone lines to the city, effectively harnessing group pressure to promote key public infrastructure investments, and effective economic governance.

- Enacting or strengthening laws and regulations that permit the privatization of public services

- Establishing an independent, impartial judiciary to give investors confidence that business disputes can be resolved fairly, without high costs in time and money, and promoting the use of alternative dispute-resolution mechanisms

- Implementing measures to improve the security of persons and property

Promoting Competitive Behavior and Protecting Consumers:

- Requiring transparency in business and financial operations

- Approving and implementing anti-monopoly legislation

- Strengthening the regulation of natural monopolies, e.g., privatized public services

- Enacting and enforcing consumer-protection legislation, including establishment of grades and standards and labeling requirements for foods and medicines

- Enacting and enforcing anti-corruption legislation, including strict legal requirements for government procurement

Providing Equitable Access to Public Services:

- Building or improving farm-to-market roads in areas with a high incidence of poverty but with good agricultural potential

- Extending rural electrification to more communities

- Constructing irrigation systems that can be managed and maintained sustainably by local water-user associations

- Reorienting agricultural-research priorities to focus on commodities produced by small farmers

- Targeting extension services to small farmers and small-farmer cooperatives

Strengthening Social Policies:

- Increasing the availability and improving the quality of basic and secondary education, technical training, and adult education

- Adopting long-run strategies to ensure access by all rural residents to a minimum package of basic health services

- Improving the targeting of social safety net programs that seek to provide better nutrition, and improving incentive mechanisms linking food assistance to school attendance and use of health services

- Accelerating the provision of potable water and sanitation systems to poor communities that lack such services

- Enacting and enforcing legislation that provides equality of opportunity to disadvantaged groups

Private-sector economic governance. Businesses, NGOs, cooperatives, and other private groups can proactively stimulate investment and employment, strengthen competitive behavior, and improve access to productive assets. Some of the following activities will be more effective when designed in cooperation with the public sector:

- Establishing industry-wide grades and standards, including environmental and health certifications and codes of behavior for labor relations and business ethics

- Establishing on-the-job training programs

- Establishing or supporting NGOs that promote sustainable microfinance institutions, as well as various educational, health, cultural, and other programs

- Improving opportunities for small farmers through contract-farming arrangements

- Using private-sector extension services to transfer technology to small farmers

- Seeking collaborative business arrangements with microenterprises

- Establishing joint public-private mechanisms to promote and stimulate tourism

- Creating technically sound (not politicized) social auditing mechanisms to monitor the effectiveness, efficiency, and integrity of governmental operations

- Devising, jointly with government agencies, programs to reduce criminal activity in specific locations, such as industrial parks devoted to *maquila* production or in major tourism areas

- Strengthening small-farmer cooperatives (e.g., through assistance by NGOs) to increase producers' bargaining power in marketing agricultural products

- Cooperative public-private efforts to promote and solve problems related to nontraditional agricultural exports

- Contract-farming arrangements for small farmers

e. Appropriate and Inappropriate Interventions

Experience in the LAC region and in other developing countries has helped define the kinds of economic governance interventions that tend to be effective in sustainably reducing rural poverty, as well as those interventions that have failed to do so. Appropriate actions for achieving significant reductions in rural poverty should start with sound macroeconomic policies that stimulate aggregate GDP growth. While such policies are necessary, they are not sufficient. A new area with great promise for benefiting poor rural residents is the provision of environmental services. Other key interventions with demonstrated positive impact include:

- Investments in education and on-the-job-training
- Market-driven system approaches to agricultural production and related activities that stress integration within the entire marketing chain and driving 'demand-led' policy reform.
- A focus on secondary cities for integrating farm-level and non-farm economic activities as well as public- and private-sector actions

Interventions with poor track records in the LAC region and in other developing countries include the following:

- Integrated rural development programs
- Subsidized credit
- Fiscal incentives for investments in rural areas
- Price and marketing controls
- Government housing programs
- Traditional public-works programs

2. Rules of Trade and Market Access[2]

Introduction. The following discussion addresses the role of rules of trade and market access within an increasingly integrated global marketplace in creating opportunities for improved livelihoods for poor people in rural Latin America. As such, it focuses on the role of economic incentives in determining opportunities for poor people to augment human and other forms of capital to enhance the quality of livelihoods. As poor people seek to improve the basis of their livelihoods in the face of meager assets, limited market opportunities, and the ever-present uncertainties of nature and the economy, their choices are limited. The choices poor people make represent optimal responses to perceived opportunities, constraints, and risks, given their previous experience and available information on relevant markets (labor, inputs, and products).

[2] The following is condensed from Annex I, authored by David L. Franklin, and Annex II, authored by Eugenio Diaz-Bonilla. References cited herein are listed in the annexes.

Potential policy and institutional arrangements regarding the rules of trade and market access under the WTO and FTAA initiatives are discussed below, as well as other ongoing global and regional market integration efforts to increase incentives for asset augmentation on the part of the rural poor, essential for secure, sustainable improvement in the quality of livelihoods.

The following discussion assesses the potential of these rules to enhance opportunities for the rural poor and achieve higher, more secure returns on household production, labor force participation, and production for markets. Raising these returns is necessary to increase assets and achieve eventual prosperity.

Background and important trends. Historically, LAC has had a positive net agricultural trade balance. However, the ratio between the value of agricultural exports and imports has decreased significantly, falling from about 3 to 3.5 in the 1960s to around 1.70 in the 1990s (Diaz-Bonilla and Reca 1999). During the 1990s, regional trade liberalization and integration took place, including new trade agreements (such as NAFTA and MERCOSUR), revitalization of older agreements (such as the Central America Common Market, Andean Pact, and CARICOM), and proliferation of smaller trade pacts (such as G-3 and bilateral agreements signed by Chile). In addition, several Latin American countries liberalized their trade regimes in the past decade, either because they joined the GATT (Mexico in 1986 and Venezuela in 1990), or because they unilaterally pursued policies of greater openness (like Chile). These developments have changed the regional policy environment.

In terms of agricultural products, one of the most important developments of the recent past has been the emergence of fruits and vegetables as the region's leading agricultural export (in value terms), displacing traditional commodities. Together with the growth of the oilseeds complex, fruits and vegetables account for a significant portion of the region's increase in production and continued surplus in net agricultural trade. At the same time, traditional exports like coffee and sugar have decreased in importance.

Another important characteristic of the region's agricultural trade — in fact, of all international trade in the Americas — is the steady increase in the share of intra-regional commerce. Abetted by such regional pacts as the North American Free Trade Agreement (NAFTA) and Mercado Común del Sur (MERCOSUR), trade within the Americas (including the United States and Canada) rose from one-fourth of total agricultural exports in the 1981-1983 period to more than one-third by the mid-1990s. Regional pacts have had an impact on the trade flows of their respective members. Clear examples of the phenomenon are Mexico with regard to NAFTA, and Uruguay, Paraguay, and (to a lesser extent) Argentina with respect to MERCOSUR. But NAFTA has also had a strong impact on the trade flows of non-member countries in the region, including Brazil, which has felt a stronger effect from NAFTA than from MERCOSUR in terms of agricultural and food exports.

All in all, regional trade liberalization and the implementation of trade agreements have fostered agricultural trade. This has led to larger coefficients of internationalization for a variety of agricultural products — measured as exports over production and imports over consumption — indicating the increasing exposure of LAC's agricultural sector to world markets.

Increased urbanization and income growth in developing countries, with the concomitant increase in middle-class consumers, brings important changes in market demands. According to projections by IFPRI (2001) 85 percent of the world increase in demand for cereals and meats will occur in developing countries by 2020. USDA (2001) estimates the number of potential middle class consumers in 20 large developing countries will jump from a mid-1990s level of 900 million people to some 1.5 billion by the mid-2000s. While these markets will be important in both product mix and quantitative terms, they will present special challenges for small farmers and the rural poor due to their demand for increased quality and safety.

Various policy issues are linked to these trends — for example, the importance of external and domestic market competitiveness in achieving agricultural and rural growth and the need to ensure that small farmers and the rural poor benefit from emerging opportunities. For example, global markets for high-value agricultural produce (HVAP) have become increasingly demanding, with HVAP export transactions from developing countries increasingly taking place under forward contracts. These transactions are subject to stringent specifications regarding food safety, quality, quantity, and timeliness of delivery. The effective participation of developing country producers in these growing global markets requires access to specialized information, technology, professional knowledge, assets, institutions, infrastructure, and liquidity.

Rules of trade: a definition. For the purposes of this document, *rules of trade* are defined as the policies and institutional arrangements that cause the economic value of activities of the rural poor to diverge from their expected value in efficient markets (that is, without policy or institutional distortions). Such policies and institutional arrangements can be linked to domestic economies in which rural households operate, countries representing potential destination markets for products with value generated by rural poor households, or transnational arrangements like the WTO or FTAA.

Policies and institutional arrangements of concern include the regional and international trade policies of LAC countries, as well as myriad other policies and institutional arrangements affecting the composition of output in an economy and relative incentives among exports, import substitutes, and non-traded goods and services. Macroeconomic and financial policies and institutional arrangements are not addressed here, unless they have a proximal nexus with the output directly embodying value generated by the rural poor.

Among the elements of rules of trade and market access taken into account in this discussion are the following: domestic import tariffs on inputs or equipment; reference price mechanisms for intra-regional trade in food commodities and food safety and phyto-sanitary requirements and standards; domestic customs valuation and administration practices; compliance with WTO commitments; trade-related intellectual property rights; and trade-related investment measures.

The relation of rules of trade to rural prosperity. Poor people are compensated in accordance with the prevailing market valuation of the products and services they produce, whether sold in markets or used within households. This framework treats poor households as “pluri-active” firms; as such, they may produce goods and services for sale in markets, sell labor services outside the household in local, regional, or international labor markets, and produce goods and services for consumption and investment within the household. Goods and services may be produced for consumption or augmentation of other assets; production can also be geared toward

investment in human capital, embodied in the household's future output as products or labor services. It is the excess or shortfall of a household's current output over its consumption for basic needs that creates the opportunity (or need) to augment (or deplete) the household's stock of human and other capital.

Rules of trade affect the valuation of a household's activities whether or not it participates in markets directly linked to the global economy. In fact, the *more isolated* a household appears from global economic forces and international prices, the *more it has been affected* by distortions in the rules of trade.

Rules of trade can affect the prices or wages that poor households receive for their efforts through direct or implicit subsidies or tariffs on household-produced goods or on goods produced by firms or other households to which the household sells its labor services as wage workers. For example, subsidies for basic grains lead to excess supplies within subsidizing countries, which are then sold on world markets at lower prices than would have prevailed in the absence of subsidies. As a result, farmers and farm workers in poor countries who produce or would have produced these commodities face lower prices, or value, for their actual or potential output or effort. Alternatively, the output of poor households or firms employing rural poor workers may face protective tariffs in countries that might have otherwise imported such output. The result is the same: The opportunity value of output — including the labor of the rural poor — is decreased by rules of trade and market access that cause market prices to diverge from price levels that would prevail without the rules.

In addition, rules of trade indirectly affect the value of assets held by poor households in a variety of ways. For instance, distortions like direct tariffs and subsidies can affect the price of complements or substitutes for goods produced with the effort of poor households, or with inputs that complement or substitute for their effort. This alters the productivity of labor and therefore affects the earnings of the poor, whether entrepreneurs or wage earners.

In addition to the direct and secondary market effects of tax and subsidy mechanisms, other indirect effects manifest themselves as economy-wide distortions in rates of exchange between domestic and international resources and as so-called non-tariff barriers (NTBs). This document will not address economy-wide effects on resource exchange rates, although these often have a major negative impact on the well-being of the rural poor (Franklin and Valdés 1993). Instead, we will focus on NTBs as a major issue and area for action within the context of rural prosperity. Most countries are still burdened by significant non-tariff barriers in their own rules of trade and continue to face significant NTBs from regional and extra-regional trading partners. As a result, poor rural households are excluded from the opportunities of globalization, despite the significant expansion and diversification of global and regional trading that has taken place in the countries that make up USAID's LAC Region.

Effects of globalization, regional trade pacts, and market access. The globalization of trade and international division of labor that has emerged as a result of lowering barriers to the movement of goods, capital, and people is intrinsically good for the rural poor of Latin America. Much of the poverty that persists in subregions of the Western Hemisphere is a consequence of exclusions of poor people from full participation in product and factor markets, domestically and

internationally. While there are many socio-cultural dimensions to such exclusions, often with deep historical roots, economic exclusion has generally occurred as the result of economic governance and policies that are persistently biased against the assets and capabilities of the rural poor.

For example, the bias against agriculture imbedded in import substitution and industrialization (ISI) policies have been documented (Franklin and Valdés 1993). The rural poor were able to benefit from the ISI strategy only by migrating out of rural areas into the shantytowns surrounding urban centers. ISI policies had an urban bias due to the fact that consumers and workers were located near urban centers, making it logical to establish protected industries near those areas. Subsidies and protection for these industries also created a bias against domestic resources as inputs, particularly in the case of labor and domestic agricultural products. Protection-created rents had to be rationed by the state, leading to explicit and implicit political alliances between urban labor unions, employers, and bureaucrats to preserve privileges created by ISI policies. These alliances also created pressures to continue to concentrate public services and investment in urban areas. Together, ISI policies and the provision of public services to urban centers at subsidized rates led to stagnant productive output and unsustainable fiscal imbalances, resulting in public indebtedness and inflationary finance. These are the roots underlying the "lost decade" of the eighties.

The collapse of ISI from its own inefficiencies and the fiscal crises that accompanied this collapse led to macroeconomic crisis and, eventually, to massive adjustments, which had severe effects on the now dislocated rural poor, who had become urban poor. Casual observers often incorrectly associate the process of globalization with these consequences. But the countries of Latin America would have been forced to adopt these measures, regardless of globalization, because they could no longer afford the heavy burden of their urban-biased development policies. This incorrect perspective on the inexorable integration of global markets expressed itself in the riots in Seattle in 1999.

The Importance of Free Trade

PROALCA and PROALCA II are key components of USAID's continuing efforts to support the Central American region by working to increase the region's trade competitiveness and ability to compete in regional and international markets. Significant successes have been achieved in areas such as trade openness (tariff reduction, regional and bilateral free trade agreements, levels of imports from the United States, and increases in intra-regional trade), expanded adoption of Intellectual Property Rights (IPR) laws, protection of workers' rights, and advances in energy and telecommunications. To continue with project goals, trade negotiators and administrators need to be trained and there has to be an increase in public support. The three pillars on which this objective will be based are: promoting more open trade and investment policies; accelerating Central America's own process of WTO-consistent, regional economic integration; and supporting efforts to improve the functioning of regional labor markets while strengthening the protection of core labor standards.

It is not globalization that excludes the rural poor from the benefits of prosperity. Rural and urban poor will benefit from further globalization if it is based on market-based rules for the allocation of resources. The rich countries of the Northern Hemisphere have aging populations with massive purchasing power. The sources of this wealth are primarily based on technologies that are intensive in human and financial capital. There exist myriad opportunities for poorer countries with their younger populations to supply the increasing consumption demands of the wealthy residents of the Northern Hemisphere.

The role of market-based rules of trade and access under the WTO and some regional trade arrangements is to enable efficient divisions of labor through "smart partnerships" between large and small enterprises across borders to produce and deliver the goods and services required by affluent northern populations. The rural poor will need help in understanding and responding to these new opportunities, as significant barriers to their full participation remain.

Too much of the process of linking markets remains hobbled by a view that trade is a zero-sum game. Many existing trade pacts have been organized to distribute access to markets as if they were of fixed size, evolved as instruments of the ISI policies. As such, these pacts are impediments, rather than vehicles for true market liberalization and globalization. Fortunately, the U.S.-led Free Trade Area for the Americas offers opportunities to overcome these interventionist legacies.

Market access, economy-wide competitiveness, and enterprise-level competitiveness. The countries in the LAC region face globally determined prices in all markets, whether or not the market is cartelized: no single country can determine world prices for the goods it trades. A country's attempts to increase prices will, at best, create opportunities for other countries to increase market share. In non-traditional products, the existence of high niche prices in destination markets have induced other countries to enter those markets, eroding niche market or seasonal window prices for non-traditional exports from LAC countries.

This means that while some countries can maintain a comparative advantage in certain commodities for significant periods of time, the strategy for sustainable rural prosperity should not depend on the existence, let alone the persistence, of these markets. Rather, the strategy should be based on a mutually re-enforcing emphasis on economy-wide competitiveness and the competitiveness of enterprises within competitive industrial clusters, which incorporate the forward and backward linkages of firms (Porter 1990). Forward linkages include marketing, logistics, and distribution system for products with value derived from the efforts of poor rural households, whether as workers or as entrepreneurs. Backward linkages involve input supplies, modern technologies, and in some cases, the output from farms and other agricultural enterprises in which poor rural people have added value through skills and effort.

The strategy should emphasize business development services to support entrepreneurship and the development of market-oriented competitive clusters in recognition that *countries do not compete in markets — enterprises do*. The competitiveness approach relies on entrepreneurship to seek new and higher value markets, meet the ever more demanding requirements of these markets, and build cooperation among competitive firms to promote support service provision and creation of an enabling policy environment.

The "picking of winners" — the essence of the failed era of import substitution and industrialization — should be avoided for both sectors and firms. Rather, support should be provided for a public-private dialogue that promotes and sustains economy-wide flexibility in financial markets, including macroeconomic stability, fiscal prudence, and a trade regime characterized by low, uniform, simple tariffs and a minimum of trade-distorting non-tariff barriers. This is the core of economy-wide competitiveness.

Economic governance, rules of trade, and market access: benefits for the rural poor. To increase the benefits of increased global market access and participation for the rural poor, the role of economic governance vis-à-vis the rules of trade and market access should be to maintain a neutral framework of economic incentives and macroeconomic stability. The poor suffer from distorted policies and unstable economic signals, as they lack the political clout to appropriate any benefit from policy distortions and cannot avoid the negative consequences. Furthermore, these distortions have real costs, as subsidies must be financed by such means as taxes — which, as they rise, will be increasingly avoided through extra-legal means. The result will be fiscal deficits that must at some point be monetized, resulting in inflation. With few assets, the poor usually fail to avoid an inflationary tax — but the rich generally succeed, either through capital flight or via asset accumulation. In the case of distortions within sectors, individuals in positions of power generally capture the benefits as sources of public patronage. Indeed, if the rural poor could benefit from such distortions, poverty in rural Mexico would have disappeared long ago, given that such interventions were the hallmark of the ruling party for close to 70 years.

On the other hand, the rural poor can realize significant benefit from the provision of truly public goods — that is, goods facilitating market access that cannot be expropriated. Public information on technology and market and weather conditions that is reliable, timely, and credible can be of great value to the rural poor. The approach to rural prosperity should identify these opportunities and develop the means to supply such public services in a sustainable fashion.

Strategic priorities for investment to promote rural prosperity. Rather than increasing protection, the best approach for developing countries is usually to eliminate biases against the agricultural sector within its general policy framework. Emphasis should be placed on complementary investments in human capital, property rights, management of land and water, technology, infrastructure, nonagricultural rural enterprises, small farmer organizations, and other forms of expansion of social capital and political participation for the poor and vulnerable.

The strategic element that emerges is that the rural poor can be reached by enhancing the competitiveness of the clusters that embody their value-adding efforts, whether in the form of products or labor services. Enterprise assistance efforts that can embody the value created by the efforts of the poor rural entrepreneurs and workers should have high relative payoffs in terms of results. This means assisting clusters in identifying new markets, understanding market-specific requirements in terms of product quality standards, SPS requirements, and other market demands, and assisting clusters in identifying and accessing the means for meeting market-demand requirements — in essence, a demand-driven strategy. This approach anticipates that helping

Promoting Mindset Change to Work Together for the Competitive Positioning of the Agriculture Sector in the Dominican Republic

USAID/Dominican Republic's Policies to Promote Competitiveness project leverages the active involvement of members of the La Vega fruit and vegetable sector as a catalyst towards achieving a mindset change and improving the competitiveness of the Dominican economy. Local producers, packers, distributors, and cooperatives work together as a cluster to identify strategic opportunities for growth. Once the cluster has identified, prioritized and made a commitment to achieving specific goals, the project provides targeted technical support that will optimize the results of cluster investment. Also under the project, and recognizing the importance of effective trade negotiations as a key to ensure the country's long term competitiveness, USAID is organizing a specialized trade negotiators program for the Ministry of Trade personnel involved in the FTAA negotiations.

the rural poor exit from poverty may involve working with the not-so-poor and even the rich to strengthen the clusters that provide the rural poor with opportunities to augment the value of their human and other assets. Significantly, the approach is strongly focused on enhancing the quality of human capital in ways that enhance the competitiveness of enterprises, requiring problem-oriented training and experience in addition to general schooling.

As previously noted, wholesale and retail marketing of agricultural and food products has undergone rapid change, particularly for high-value agricultural products (HVAPs). This poses special obstacles for small-scale farmers, often the majority population in poor developing nations, who will have difficulty improving livelihoods if they are not involved in this rapidly evolving sector. The key challenge will be to find non-distorting, equitable policy and technology options that support the participation of small-scale producers in diversified and dynamic agricultural and food markets. Central issues include:

(1) Whether wholesale and retail outlets have options for securing products other than through smallholder farmers

(2) Whether governments play an effective role in providing a facilitating environment for smallholder production and favor the establishment of forward linkages between the public sector and other agents within the food value chain

(3) To what degree smallholder farmers participate in the management of smallholder schemes

Developing successful models ensuring the involvement of small-scale operators in the production of diversified and dynamic agricultural products require the following:

(1) Market reform policies that encourage smallholder investment, avoid differential subsidies to large-scale operations, and reduce transaction costs

(2) Institutional development to help small-scale operators meet global standards for quality, food safety, and timeliness

(3) Provision of public goods like research, extension, and infrastructure

Establishing Market Access to Promote Trade

The Argentine-Dutch supermarket consortium DISCO-Ahold, which operates the Plaza Vea hyper-marts and Santa Isabel supermarkets in Peru, is working with USAID/Peru's Poverty Reduction and Alleviation Project (PRA) Business Support Center in Puno and the private trout processing company Arapa S.A.C. to bring Arapa's production into the processed market on a national and potentially international level. PRA and the CSE Puno were instrumental in identifying the market opportunity with DISCO-Ahold and provided support to Arapa in the negotiation of sales contracts. This new market will allow Arapa to increase sales and output, securing employment and income for 3,500 families directly or indirectly involved in the industry.

By requiring political commitment on the part of government, as well as a broader willingness to share the risks and rewards of vertical coordination, such an approach can allow small-scale producers to participate in growing high-return sectors. The following table, which appears on the next page, presents an overview of mechanisms for incorporating the overall strategic approach for rules of trade and market access, with links to other actions areas to be undertaken by USAID under the Agency's LAC Rural Prosperity Initiatives. Specific recommendations apply throughout the hemisphere: subregional factors affect cluster selection, according to

impact, but not the overall approach. For example, tourism is emphasized in the Caribbean and high-value agriculture in Central America and the Andes, while light manufacturing opportunities is a focus throughout the region.

Opportunities for Enhanced Rural Prosperity: Rules of Trade and Market Access			
Rules, Policies, and Institutional Arrangements	**Prevailing Conditions in LAC Countries**	**Effects on Rural Poor**	**Opportunity for USAID/LAC and Partners**
Domestic Import Tariffs on Inputs or Equipment	Most countries have reduced tariffs, but still use NTBs to limit imports modern inputs	Remaining impediments reduce land and rural labor productivity	Promote policy dialogue toward low, uniform, and simple tariff regimes
Reference Price Mechanisms for Intra-regional Trade in Food Commodities	In use in most LAC country members of Andean Pact, CACM, or CARICOM for intra-regional trade in foods	Arbitrary application causes food insecurity and unpredictable markets; limits diversification	Assistance to individual countries to measure welfare effects as FTAA preparation
Domestic Food Safety and Phyto-sanitary Standards	Certification, labeling, and testing procedures are slow and erratic	Lower food security and lower labor productivity (wages)	Promote science-based harmonization and reciprocity
Rich Country Food Safety and Phyto-sanitary Requirements	EU, Japan, and U.S. standards have been used to protect rich country producers	Limits employment opportunities for rural workers and farming diversification	Partnership with USTR, APHIS, and FDA to assist LACs in complying
International Standards Organizations	Limited participation and use of ISO, IEC, etc. in manufacturing	Limits market niches and opportunities for contract production	GDA partnerships with large importers to use in LAC
Domestic Customs Valuation and Administration Practices	Most countries non-compliant with WTO market-based valuations	Creates implicit domestic protection and bias against agriculture	Increase assistance for customs modernization using information technology
Compliance With WTO Commitments	Most countries are members but have yet to comply with protocols	Symptom of inward orientation of domestic policies	Support through public/private dialogue
Trade-Related Intellectual Property Rights	Insecurity of IPR limits use of modern technologies	Lower land and labor productivity, poor cluster linkages	GDA partnership to provide access to rural enterprises
Trade-Related Investment Measures	Impediments to land use and protection of specific sectors	Prevents “smart partnerships” and links with global markets	Support through public/private dialogue

3. Science and Technology[3]

Introduction. In this new era, globalization and trade expansion forces have converged to create new farm and rural economic linkages to regional and global markets. These linkages create new opportunities for innovative, demand-driven knowledge systems to complement previously under-exploited resources and contribute to economic growth through rural economic expansion,

[3] The following is condensed from Annex III, authored by David D. Bathrick. References cited herein are listed in the annex.

poverty reduction, and increased overall rural prosperity. The discussion below develops a framework for understanding these needs and responding with appropriate rural-based science and technology (S&T) programs. The following framework provides a rationale and explanation of key dynamics and describes the structural hurdles to be confronted; it also offers potential themes for USAID to consider in responding to the challenges and opportunities.

An essential underpinning for LAC rural prosperity is economic growth. A fundamental precept is that now, more than ever, economic growth is linked with improved factor productivity, using knowledge systems generated via S&T. The contribution S&T services can make to rural productivity growth, especially among poor farms, has the potential to ameliorate the negative effects of trade liberalization and enhance its positive impact (Tabor 1995). A complementary knowledge and technology base is essential for increasing rural prosperity, as it introduces higher value activities that inherently generate farm and off-farm employment and new income streams for broader rural-based services and products.

From the 1950s to the 1980s, complementary S&T focused on increasing food staple productivity as a major element within the era's import substitution approach. Despite the important improvements in food crops that were achieved, their full economic impact was never realized, as the national S&T knowledge system was not in step with trade-driven realities. The structural adjustment and complementary lending programs (SAL) of the mid-1980s heralded an increased focus on macroeconomic reform and attention to agriculture began to wane. At the same time, SAL budgetary reform sparked major declines in rural investment, particularly in agricultural S&T. Basic S&T support system capacities eroded notably at the very time that structural changes required new S&T direction. For example, SAL-generated policy reforms triggered the revaluation of overvalued currencies, requiring that tradable products be price-competitive and demanding improved efficiencies.

Further trade liberalization in the interim has significantly accentuated the emphasis on competitiveness. However, little consideration has been given to developing essential S&T capacity. To accelerate this economic transformation process in a way that strengthens rural prosperity, a complementary, market-based science and technology support mechanism is needed to provide agriculture, livestock and forest producers, and related rural enterprises and industries with the means to more rapidly adapt and grow. Within S&T, a variety of issues have emerged with relevance to rural poverty, including the potential of S&T for generating large multiplier effects, an increase in the number of vulnerable producers, and the eroded capacity for a satisfactory S&T response.

In this new era, tremendous rural- and national-level multipliers are possible. In response to the forces of macroeconomic reform, urbanization, new markets, and global competitiveness, agriculture is undergoing dramatic change, shifting from a basic grains-and-raw-commodity system toward a system of specialty and processed foods and agro-industry, capable of generating much greater value-added. As such, agriculture's current economic contribution surpasses important food objectives, as reflected by increased employment and the sector's generally under-appreciated contributions to GDP. According to IFPRI, every $1 increase in agricultural output in Latin America has resulted in nearly $4 of increased overall economic output (Pinstrup-Andersen, Lundberg, and Garrett 1995).

With new competition engendered by trade liberalization, significant numbers of producers are more vulnerable and face increasing challenges. Many producers must adjust farm enterprises, crops, and activities by diversifying, shifting to non-farm activities, or migrating to urban centers. The increase in the number of trade pacts, including sub-regional, FTAA, and WTO trade arrangements, presents challenges for millions of producers confronted with difficult external market opportunities and new competitors. Alternative strategies are urgently needed for those producers with sufficient assets, agro-ecological endowment, and market access to compete in this environment.

Paradoxically, given the eroded S&T response capacity, the fundamental S&T support systems needed to take advantage of new opportunities and prepare for an increasingly competitive economic environment are sorely lacking. Competitiveness-enhancement production and post-harvest technologies and a greater understanding of such issues as plant and animal health and food safety requirements are required; business and technology skills will also be required to take advantage of rapidly emerging opportunities. In addition, attention must be focused on a broader range of natural resource management and conservation practices to sustain one of LAC's most valuable factors of production: its diverse agro-ecological setting. In short, a new rural-based knowledge system that supports agricultural and non-agricultural opportunities is desperately needed. The new system should focus on three priority areas: competitiveness, natural resources and the environment, and rural poverty reduction.

An overview of public and private sector support to S&T. During the three decades of the import substitution era, government support to agricultural S&T focused on expansion of the National Agricultural Research Institute (INIA) model. With extensive donor support, INIAs became the major sources of research and extension services for inward-focused, national commodity programs. Generally speaking, the institutes had no base of stakeholder support, as they lacked links to private firms, producer associations, and agri-businesses. In the wake of SAL-induced government budgetary consolidation, which began to take hold in the 1980s, INIA capacities eroded notably. Budgetary support for the institutes declined precipitously, bottoming out in the early 1990s before increasing slightly in the later half of the decade.

As budgetary support for the public sector-linked INIAs declined, there were a few attempts to introduce institutional innovation through the establishment of quasi-private foundations for agricultural research and knowledge transfer. The intent was to provide more technical focus, ensure institutional responsiveness, and generate broader financial support. Even so, after more than a decade, most INIAs were still largely funded by governments. However, private sector support to agricultural S&T did begin to expand notably in the 1990s, with big jumps in Chile, Argentina, and Brazil, as well as in certain smaller countries.

An overview of donor support for S&T. In the past — particularly during the 1970s — donor support was a crucial element in INIA formation. Donor support for the institutes peaked in LAC in the mid-1980s at about $300 million annually, rapidly declining to its current level of about $10 million, the lowest level since the early 1960s (Beintema and Pardy 2001). The drop in donor support was undertaken without a coordinated exit strategy. Over the years, various donors

have supported alternative institutional approaches for providing agricultural S&T. But none has received the level of donor support provided to the INIAs and their success has been limited.

USAID has played a major role in promoting agricultural S&T, supporting the establishment of agricultural S&T institutional bases in many countries. Currently USAID provides relatively minor support for international agricultural research. Even so, two noteworthy programmatic innovations have emerged from the agency during the recent period of declining budgetary investments: private sector foundations and support for non-traditional agricultural exports (NTAE). Currently USAID/LAC has two trade capacity-building initiatives involving S&T, with key elements that focus on food safety, animal and plant health, trade policies, WTO negotiations, and labor markets. While these support projects are helping host country leaders get ready to "play by the new rules," similar projects to begin helping rural residents upgrade their capacities to meet new challenges have not yet emerged.

The ***IDB*** has been the single largest agricultural donor in LAC. Support peaked in 1985 at $950 million, plummeting to around $10 million in 1993. While all the donors are pursuing new rural sector development initiatives, the IDB is the only one that has seen funding levels reverse and climb. In 1996 its portfolio in the sector increased to over $100 million (IDB 2000). Over the last two years, it has given considerable attention to raising the visibility of rural sector-related issues via research, major conferences, and strategic planning activities (IDB 2000).

For several years the ***World Bank*** has been working on a sector-planning activity to better address poverty; this effort should be launched in the near future. As with other donors, World Bank support for agricultural S&T and the agriculture sector in general has undergone a decline in recent years. Under the new initiative, stronger attention will be given to S&T issues, particularly within the broader context of support for rural sector knowledge generation.

Policy and institutional issues in launching a new S&T system for rural prosperity. The formation of an appropriate knowledge generation system is important, given WTO requirements and the projected 2005 launch of the FTAA. WTO regulations grant expanded market accession to agricultural, livestock, and forest products if approved science-based systems are in place. At the same time, it will be essential for countries to facilitate the acquisition of a broad range of S&T- and knowledge-based competitiveness skills. To assist countries in this endeavor, USAID and donor partners must coordinate to develop strategies to address the following S&T-related issues.

Creating a pro-rural S&T national commitment - Due to its complex, intertwined economic and political legacy, special challenges exist in responding to changing conditions in the LAC region. For Asia's rural sector to successfully stimulate national broad-based economic growth and launch the Asian tiger era, "competent and active government" was required (Timmer 1995). To create this ideal level of commitment in the LAC region, policy makers, political leaders, business leaders, and producer associations must build a base of popular support that will prod countries in new national directions and promote national ownership.

Facilitating the new era institutional model. As old era INIA institutional framework cannot serve today's needs, *new era* public good roles need to be defined and promoted to

generate political and financial support within the private sector. A government presence, in a facilitating role, is needed as a complement for a new private sector support base, made up of producer associations, universities, and NGOs. In the multi-sector, multi-institutional world now emerging, ministries and other agencies — in agriculture, trade and commerce, environment, economy and finance, health, science, and other areas — must learn to interact in mutually supporting ways. New mechanisms for developing and incorporating complementary international support should be considered, including global networks organized under CGIAR, USDA, and USAID's Collaborative Research Support Program (CRSP). NGOs and consulting companies provide other resources for conducting front-line adaptive research and technology outreach. There is an urgent need for more effective coordination of donor support for LAC's S&T system. USAID may possess comparative advantage in this regard, given its traditional role in long-term institutional development and the agency's access to grant funds.

Technical requirements for launching a new era agriculture S&T program - In addition the new institutional structure and framework described above, countries will need to define a **technical framework** and the **discrete technical areas** within it that require attention.

The **technical framework** needs to consider that in the dynamics of the *new era*, rural residents will gain incomes from multiple sources and the concept of *technology* must be cast more broadly. And, in the context of the strategic framework of this white paper, new, rural-based knowledge systems should focus on three high-priority, interrelated themes: competitiveness, natural resources, and rural livelihoods.

Increasingly, market competitiveness will be determined by such factors as commodity-specific market share, comparative production costs, relative export advantage, and related competitiveness support (Blackman, Shui, Cramer and E.J.Wailes 1992). Due to rising export product entrance requirements, establishing market share will require fresh and processed commodities that meet WTO standards. A major challenge will be to identify and access appropriate varieties with strong market demand potential and conduct adaptive research in the right agro-ecological zone. Another challenge will be developing strong, cost-effective methodologies for diffusing labor-intensive production and post-harvest technologies. Food safety and bio-technology safety regulations are other important challenges to be dealt with.

The Importance of Information Technology in Promoting Market Access

In 2002, the USAID/Bolivia Market Access and Poverty Alleviation (MAPA) Project set out to establish a market information service to provide daily market prices for agricultural commodities throughout Bolivia. Price information for certain goods and markets will be collected on a daily basis, validated, disseminated and broadcasted to the public within 24 hours. This process will ensure that accurate market information is widely available to all participants in the business chain and lead to more efficient markets.

In the *new era*, as in the old, the natural resource base — including soil, forest, water, and genetic resources — will be the foundation of future growth. Given the increasing degradation of these resources, the development and diffusion of technologies to reverse deforestation, soil degradation, overgrazing, and loss of bio-diversity trends become even more urgent under the new framework. "Green Seal"-type technology certification systems, organic certification

practices, and shade-grown coffee habitat for topical birds are S&T activities that generate additional value while enhancing the environment.

While a more dynamic food and agro-industrial system will play an essential role, generating numerous multipliers and benefits, certain rural livelihood opportunities will be displaced, given the dynamics of increased competition and changing demand. Highly vulnerable cereal and bean producers are likely to require new, cost-effective technologies to facilitate the transition to alternative production and employment opportunities. Other S&T knowledge systems are needed to support non-farm rural enterprise options and other off-farm employment opportunities.

Among the many **discrete technical issues and challenges** that may come into play, the following are considered to be potentially more important to rural prosperity and poverty reduction and for which countries will require assistance.

- *Definition of potential product lines and support requirements.* Countries will require assistance in conducting the necessary assessments of market requirements, agronomic potential, and competitiveness factors and, accordingly, defining the technical support needs and means of provision.

- *Develop an outreach program for basic food producers to use improved technologies*. For LAC's small basic grains producers, a particularly daunting challenge comes as protection is removed and competitiveness issues become real. A major need is the introduction of technologies to reduce per-unit production costs and, as appropriate, reduce production areas for basic food crops, thereby freeing up land and labor for more remunerative pursuits.

- *A training program to form a new cadre of critical personnel*. Much of the LAC region suffers from a dearth of technical skills, a problem that should be addressed through a participant training program to form a *new era* critical cadre of M.S.-qualified and selected Ph.D.-trained personnel. Applied vocational training in selected local areas is also needed. Targeted disciplines should be identified and job-placement assistance provided upon graduation.

- *Specific S&T opportunities within key technical areas*. The trade liberalization process has focused increased attention on key S&T-related issues, including food and consumer safety, plant and animal health, and biotechnology, as well as rapidly advancing computer and learning technology applications. These areas provide targeted opportunities for potential USAID/LAC activity. For example:

    - There is considerable attraction to biotechnology for its potential as a crop improvement tool that addresses multiple challenges. Important biotechnology advances include products targeted to counter pest resistance, improve yields and biotic tolerances, increase nutritional benefits, and reduce environmental impact. (National Academy of Sciences 2000). While genetically modified organism (GMO) agricultural products in LAC hold "promising results for agricultural productivity, "this potential is constrained by universal concerns associated with

human health and affects on bio-diversity (Diaz-Bonilla 1999). This widespread fear and concern requires that highly professional national-level bio-safety systems be in place.

- Our society now places increased importance on food safety, due in part to the increase of imported food products. Also, food safety has become a more complicated issue, with the emerging producer-to-processor-to-exporter-to consumer chain increasing opportunities for contamination. While much progress has been made in the regulatory arena, obstacles remain. For one, LAC countries generally play a minor role in international reference organizations; in addition, few risk analysis units exist, and those that do are generally inadequate. Further, there is little interaction between the public and private sectors and a lack of information and surveillance systems to support decision making (IICA 2001).

  As a response to these dynamics, it is important to note USAID/LAC's subregional program approach under the Caribbean Agricultural Competitiveness Program. In the context of the gap this effort is addressing, providing a minimal level of support to ensure that future trading partners have the basic tools they need to function seems to be a worthy investment.

- In the area of animal and plant health, there is an increasing focus on the prevention and eradication of pests and diseases from crops and livestock; a related issue, pesticide residues, has important human health implications. Countries are concerned about the potential economic and safety consequences of receiving unhealthy animals or plants that could affect similar species or native fauna and flora, resulting in widespread disease unless quickly diagnosed and treated. Rigorous, science-based public sector institutions, clear-cut health and trade policies, precise standards, technical audit and inspection mechanisms, quarantine controls, and eradication measures are needed to address these issues.

- Advances in information communication technology (ICT), brought about through advances in Internet services and electronic commerce, have opened up exciting opportunities for developing countries. The new ICT-driven era has the potential to provide particular benefits for people in isolated rural areas. For example, public call offices were established under an FAO-sponsored program in Indonesia, allowing villagers and farmers to exchange communications and obtain market prices on crops via satellite and cellular telephone links. Given the wide range of potential applications of these technological advances for development, the LAC Bureau recently hired an ICT specialist with considerable international experience. Washington might also invest in an information system so the field is better informed/warned about what is coming down the road; i.e., future trends of markets and production.

Conclusion - Our interconnected world is passing through a time of unprecedented change, with a particularly strong impact on the rural poor. The rural sector is very complex, making it necessary to periodically re-examine familiar approaches that once helped orient development

professionals and government officials. A reformed rural-based knowledge system, focused on competitiveness, natural resources, and poverty amelioration, is needed to provide millions of rural dwellers with the critical skills they need to adapt, compete, and win in the new era. At this critical juncture, USAID is challenged to perform a pivotal role through its traditional leadership in rural-based S&T with the potential to generate unparalleled mutual benefits for the LAC region and the United States.

What role should/can USAID play? - First, this is a question that ultimately must be answered by the missions under guidance from the Bureau and in consultation with other donors and development partners. Second, the precise answer should not be attempted at this turning point of embarkation on a new-era strategic approach, but rather it should be allowed to evolve with input from the complete range of stakeholders, especially from those intended to be the ultimate beneficiaries. What follows is offered as guidance for this process and is drawn largely from comments by Reed Hertford on the attached paper by David Bathrick (Hertford 2002).

- **The number of objectives for agricultural research should be kept to a few: be good at one or two things.** There is a high risk that economic returns will decline as more objectives are hung on the research tree. Choices will need to be made based on the development setting and asset endowments under which opportunities are being considered and these should be made at the country or regional level with local participation. Thus, the research agenda and objectives should vary from country to country and region to region. If there is one lesson we learned from the farming systems and on farm research era, it is the value of getting the farmer/user's opinion and that what is needed and works on the ground varies tremendously with user and location differences.

- **Conduct careful occupational analysis to target research on poverty reduction**. Poverty reduction efforts have four options: reduce unemployment, increase returns and/or employment for existing rural occupations, facilitate occupational shifts that raise returns and/or employment, and create new higher return occupations. Therefore, careful occupational analysis can be very helpful in targeting accurately agricultural research to raise productivity/competitiveness and reduce rural poverty. Target those occupations where the incidence of poverty is greatest and give priority to the types of research that might benefit several different combinations of multiple occupations.

- **Use competitiveness criteria to prioritize research strategies and specific research projects**. Careful analysis of comparative advantage and competitive positions should guide choices among alternative research strategies or options. Unless rural poverty reduction programs contribute to competitiveness, they are likely not to be sustainable. Again, a participatory approach involving the local population is essential to complement the occupational and competitiveness analyses.

- **Concentrate on the tropics.** Assisting the rural poor through agricultural research must concentrate on the tropics. First, that is where most of LAC's poverty is located. Second, there is a 'poverty' of scientific and technological knowledge assets dealing specifically with tropical agriculture. This underscores the need for a capacity-building effort to give more

specific tropical content to the training participants receive and to build additional real knowledge assets for the tropics.

- **Make some early gains using conventional agricultural research methodologies**. The tropical countries that would be targets of USAID's efforts are--for the most part--small players in biotechnology. Also, the money currently being spent on biotechnology research in the region is derived from donors and public sector institutions. The private sector is a minor player because potential markets are not big enough in LAC to support significant efforts in biotechnology. Without private sector financing, plus the limitations on scientific capacities, biotechnology research to reduce poverty in tropical LAC is not likely the route the region should first go.

- **Exploit an existing organization to respond to the institutional recommendation**. A mechanism already exists for supporting the type of multi-sector and multi-institutional organizational models for agricultural S&T efforts recommended above. FONTAGRO, the Regional Fund for Agricultural Technology, created under the IADB aegis, is an endowment fund designed to yield a steady resource flow into the indefinite future for competitive grants that support agricultural research projects producing transnational, public goods.

3. Access to Assets[4]

Overview. No matter how trite it may seem, the old adage "it takes money to make money" goes a long way in explaining why the poor in LAC remain poor. As David Franklin states in his piece on the rules of trade and market access (Attachment 1), "Poor people in rural Latin America are poor because the market value of their assets is low and because their opportunities to augment these assets continue to be low as well." In addition, the poor are often at a disadvantage with respect to the rate and variability of return on these assets, which helps explain their low market value. Thus, perhaps the first question to ask if we want to improve the well-being of the poor while enhancing rural prosperity can be simply stated in two parts, as follows: *"What needs to be done to provide the rural poor with increased access to assets and to provide them with opportunities for sustainable increases in their returns to these?"*

Unfortunately, there are no single, best answers to these questions. Different approaches are required to address the existing heterogeneity in asset endowments and the many factors that affect asset access and returns within the specific geographic setting of the population being targeted. In broad terms, these factors include the rules of trade, market access, technology, governance, and economic and environmental shocks, all treated in this document. Hopefully, the following discussion will provide guidance on the right questions to ask and where to look for answers, as well as what should be considered when developing potential approaches and interventions that will be effective in a particular development context.

What is meant by access to assets? Assets are defined here simply as "anything that can be utilized to produce value." Value, in the context of this discussion, generally refers to the

[4] The principal author prepared the following and references cited herein are found in the list of references for the body of the paper

generation of income. Defined in this manner, not much is left out, whether tangible or intangible. Value also includes elements often defined as services that create or form assets, such as education, health, and some forms of infrastructure. Such a broad definition allows us to establish several general categories of assets. Such flexibility is important in attempting to identify, augment, or complement the limited assets of the poor to increase productivity and incomes.

Access to an asset means that an individual has the opportunity to use it at some point in time to produce value and generate income and wealth. Access can be in the form of direct or active control over the asset, as in the case of ownership and rental. Access may be indirect, through organizations or associations, and the control passive, as in the case of common property and many publicly provided assets. Assets can be owned individually, by a group, by the state, or on an open-access basis, where there are institutional understandings governing use but no single institution controls access. People can control assets by rent, hire, or influence through family, village, or politics without having actual ownership; they can even "access" (that is, benefit from) assets controlled by others by taking advantage of associated opportunities. An example of the latter is the use of roads or telecommunications systems or employment in non-owned enterprises (IFAD 2001).

Asset categories and rural prosperity. There are numerous categorizations of assets, as described in the literature, and many kinds of assets have importance for the poor. Assets can be tangible or intangible and be provided publicly or be privately owned. The following three categories — human capital, physical capital, and social capital — are the categories employed in this discussion. Natural capital, financial capital, and institutional assets are other common terms used to categorize assets, but for the purposes of this discussion, they are considered as subsets of human, physical, and social capital, as defined below.

- *Human capital* includes the capacity for labor and skills needed to produce a good or service and can be affected by conditions of health as well as enhanced by education and training. Education and health are often considered as assets or types of human capital. Entrepreneurial skills, management ability, and knowledge in general are elements of human capital.

- *Physical capital* is the broadest category by far and includes natural assets, infrastructure and facilities, financial resources, other property, technology and information, and all else that is tangible and not a form of human or social capital. Among the natural assets are land, water, rivers, forests, climate, and location. Infrastructure and facilities include such things as roads and other transport facilities, telecommunications, electrification facilities, plants and equipment, and physical factors of production. Financial assets are primarily money holdings and savings and credit instruments, and include insurance as a savings or financial service. Technology and information are included here as physical assets, even though information and some forms of technology could also be defined as human capital.

- *Social capital* is defined as the set of norms, obligations, and social networks to improve social efficiency by facilitating coordinated action. (Putman 1993). Social

> capital refers to the social and cultural coherence of society, the norms and values that govern interactions among people, and the institutions in which they are embedded. It includes vertical as well as horizontal associations, as well as behavior among entities such as firms. The most encompassing interpretation of social capital includes the social and political environment that shapes social structure and enables norms to develop. This view includes the most formalized institutional relationships and structures, such as government, political regime, rule of law, court system, and civil and political liberties (World Bank 1998). The rules of trade and economic governance would be added to the stock of social capital under the above definition.[5]

Role of assets: Access to assets determines the poor's physical well being, their ability to pursue a livelihood and function as part of the society. Given their limited access to any one asset, the poor depend on a wide range of assets which, in general, are assigned to one or more of three principal roles. Most assets of the poor are employed directly in the *production of income*. But the quantity and types of assets held — that is, *level of savings* — is a major determinant of the capacity to absorb unexpected shocks in terms of loss of income, catastrophic expenses, or loss of assets. In their third role, *collateral for borrowing*, assets can increase the level and diversity of assets assigned to generate income, mitigate the effect of shocks, or provide for basic needs and other consumption.

Access to the opportunity to employ a mixture of assets to generate income can have important effects on total income. For example, among smallholder beneficiaries of Mexican land reform, land was an important determinant of total income, but irrigated land yielded about five times more income per hectare than rain-fed land. In this same group of households, it was found that access to credit and technical assistance made a high contribution to agricultural income (de Janvry and Sadoulet 2000). One can imagine similar complementary effects when entering other assets into the equation, including market information, new technology, or other physical assets. In other words, what is important to poverty reduction is not just the level of assets the poor have access to, but also complementarity among existing assets. High substitution effects among assets in generating income indicate that the heterogeneity of asset positions corresponds to strategies to escape poverty by altering asset endowments and the factors that affect returns on assets (de Janvry and Sadoluet 2000).

Unequal returns to assets and their skewed distribution influence poverty in subtle ways. A regional dimension to poverty exists, reflecting unequal opportunities across regions to use asset endowments to generate income. These regional effects are important to returns to assets employed in productive enterprises as well as returns to human capital in the form of agricultural and non-agricultural wage incomes. For example, in some cases, if the rural poor received the same returns that the urban rich obtain for the same asset, poverty would be dramatically reduced. Sometimes regional and local differences in returns to assets are related to the distribution of assets, especially when factor markets are monopolized by the rich. In such cases, markets can not function competitively and the poor are likely to suffer as a result.

[5] Note: Since, per se, there are no right or wrong categorizations and this paper has several different authors, other sections of the paper may refer to different categorizations, according to the preference of the section's author. This should not cause confusion and is consistent with the need to look at this subject from numerous perspectives.

Relationship of human capital to rural prosperity. Better health, education, and nutrition help the poor escape rural poverty by increasing resourcefulness, income, and food production of farmers and workers in low-income areas. It also helps reduce poverty by increasing mobility to (and earning capacity from) cash crops, rural non-farm production, and urban work, allowing for migration if required. Human assets complement other forms of assets. If the economy, physical capital, social capital, and employment stagnate, those with spare human assets will be better equipped to simply shift among income-earning opportunities. Shifting or increasing human-asset-improving outlays to the rural poor, especially to women, usually raises cost-effectiveness, partly because of mutual reinforcement of better health, nutrition, and learning, resulting in smaller families, higher productivity, and reduced poverty (IFAD 2001).

Increasing human capital in rural populations should be high on the list for attention and investment when seeking to address the long-term needs of the poor and permanently reduce rural poverty. Urban-rural inequalities in the basic social services that build human capital are widespread and actions to correct these are needed, especially with respect to the quantity and quality of education and health programs. Primary and secondary schooling are highly important in determining both job placement and income levels, and demand for access to these services is intense among rural populations; education should be a key area of investment (Echeverría 1998). While adult education yields a positive return in agriculture, animal, non-agricultural wage income, and self-employment income, it is most valued in non-agricultural labor markets. Thus, the type of education with the highest return in rural areas should prepare adults to access non-agricultural employment (de Janvry and Sadoulet 2000).

The growing marginalization of rural areas, including reduced employment options and declines in population, makes it harder to provide basic services for those that remain. Trade-offs between social spending and local sources of income may become necessary. However, in some cases it may be possible to serve both objectives with the same investment. For example, building a good road and providing bus transportation to schools in nearby areas may be preferable to investing in schools and teachers scattered about the countryside, as the road will also improve access to markets and increase access to additional assets.

Vocational training should focus on the specialization and skills demanded by markets. For example, the emphasis on agricultural training in some areas is far out of proportion to the potential number of jobs. Care should be taken to provide men and women in rural areas with skills that match local labor requirements, including self-employment. Demand-driven, vocational training programs operated in cooperation with private companies have been effective in this regard (Echeverría 1998).

Importance of physical capital.[6] As indicated above, access to land, particularly irrigated land, is an important determinant of total income. However, the poor generally have little land and therefore draw limited benefits from the direct effects of improved agricultural opportunities. One preconception that must be overcome is the image of the contented farmer on his half hectare growing corn and beans, and the conclusion that the solution to poverty is to help him grow more corn and beans (Burke 2001). The reality is that one-third of the rural poor have no

[6] Technology, information, and knowledge in general are recognized here as assets. However, given their unique importance, these are discussed separately in other sections of this document.

land and many of the remainder do not have enough to do more than supplement off-farm earnings.

It has been shown that when the incentives and institutional framework are favorable, improved access to land can assist the rural poor escape poverty through the agricultural and multiple activity paths. Expropriative land reform has been used successfully in Latin America as a tool to create a more favorable (stable) enabling environment when there was a socio-political imperative for land transfer, a type of social justice to relieve pressure and reduce potential for conflict. However, it is a drastic measure and has not lived up to expectations in terms of being an important and effective mechanism for transferring assets to the rural poor because it is conflictive, disruptive and extremely costly. We have probably seen the end of such redistributions and alternative (new) methods of providing the poor with improved access to land need to be exploited. Among these methods, subsidizing the transaction process for market – negotiated land transfer with willing buyer/willing seller has shown potential for providing the poor increased access to land. Such access can be further expanded with the establishment of land funds for financing land transfers and by reducing conflict and increasing security through the resolution of title disputes. Accordingly, interventions to improve the legal and institutional framework to provide secure titles help increase access to land by the poor. Clear titles and well defined property rights facilitate access to land through the rental market, one of the most effective means to provide the rural poor with access to land. Finally, decentralized property taxation can serve to enhance both the land transfer and the rental markets with the additional benefit of providing revenues for public/social investments based on local decision making.

For many of the poor, the issue is not having a piece of land per se, but rather security and transferability of property (improved access to land). Titling serves to augment the value of land as collateral for access to finance and, thereby, other complementary assets. Titling facilitates conversion to other assets at a better price and, thereby, facilitates recuperation of sweat capital for investment in other local income generating options or for migration. Finally, land reform has provided major benefits to the non-beneficiary, rural poor in terms of transferring income to farmers who spend locally. These farmers create local opportunities in contrast to those that took income from agriculture and spent it on capital-intensive goods and imports that did little for the local economy. Herein lays the secret. It is employment that offers the way out of poverty for the bulk of the rural poor (Mellor, 2000).

Agricultural solutions to rural poverty involve adding value to farms, growing high-value crops on small holdings to generate higher returns and create employment opportunities, and processing and marketing activities. For this to occur, large investments in many subcategories of physical assets — including infrastructure, plants and equipment, technology, information management, and financial markets — will be needed to complement existing and future investments in human and social capital. Innovative mechanisms for providing adequate infrastructure to rural areas are needed, especially in communications, roads, reliable electric power, and irrigation.

In Nicaragua, control over assets needed to derive income from off-farm activities rises with access to land. As a result, those with larger farms are able to derive larger incomes from off-farm activities, even though off-farm incomes rise with farm size less than do farm incomes.

Among off-farm sources of income, agricultural wage income is the most equal among the landed and land-poor, while other forms of income, such as non-agricultural wages, self-employment, migration, and rents, are highly related to land assets. Land-poor households are therefore confined to easy-entry, low-paying, labor market activities, while wealthier households can enter higher paying activities. Thus, land endowments are important in explaining relative abilities to diversify in non-farm activities, largely due to the ways credit markets work, or do not work, for the land-poor (Echeverría 1998).

Access to credit or additional financial assets is widely recognized as one of the most serious constraints to increased economic activity in rural areas, especially for agricultural enterprises. Deeper rural financial markets are expected to reduce transaction costs and facilitate greater degrees of factor and product market integration, thereby inducing increases in factor productivity and facilitating risk management across the economy. Given the importance of this issue, access to credit (financial markets) is described below in greater detail than access issues linked to other forms of assets.

The supply of formal financial services and rural prosperity are related in complex ways. Sometimes formal financial services can release credit constraints and facilitate a fuller exploitation of existing productive opportunities. At times, financial services can assist in household risk-management strategies, thereby stabilizing incomes and encouraging productive investment. When productive opportunities do not exist, however, repayment capacity is weak and the servicing of debt contracts can impoverish borrowers. When loan contracts are not enforced, social capital will be eroded. Moreover, loans do not typically create productive opportunities when other constraints are binding. The challenge is to understand when finance matters for agricultural development and when finance, by itself, will not achieve the desired result or may actually be counterproductive.

Notwithstanding the considerable time and resources that have been dedicated to strengthening them, rural financial markets in developing countries and economies in transition are extremely shallow and have not contributed proportionally to rural prosperity. At best, 10 to 15 percent of all rural households have access to formal credit. In general, the limited development of rural financial markets reflects the shortcomings in physical infrastructure (e.g., roads, communications), gaps in the stock of human capital (e.g., education), and limited social capital (e.g., property rights, contract enforcement) found in the rural areas of developing countries. Three pervasive problems constrain efforts to deepen rural financial markets:

- First, there are universal fixed costs in the provision of financial services. As a consequence, economies of scale and economies of scope are important in the production of these services.

- Second, systemic shocks from covariant incomes and cash flows are a grave threat to the sustainability of rural financial intermediation. Particularly in small developing countries, financial intermediaries encounter limited opportunities to address systemic risks through portfolio diversification.

- Third, given the information and incentive constraints that hinder rural financial transactions, successful financial intermediation requires sustained learning

processes. It also needs repetitive transactions, an accumulation of reputation capital, and the development of relationships based on the value of long-term connections between intermediaries and clients.

On the other hand, over the past 20 years, donors, especially in LAC, have developed a number of successful models for delivering financial services to the poor. Although the vast majority of these programs have been developed in urban and peri-urban markets, there are a few that have succeeded in developing appropriate lending products for rural areas. In addition, we have begun to see successful approaches developed with credit unions, many of which are located in secondary cities and rural market towns. It will be important to make a concerted effort to apply these lessons in rural areas, a process that has already begun in a few LAC missions.

In summary, broad and substantial obstacles impede further deepening of rural financial market. These difficulties lead to unsatisfied excess demand for financial services from several perspectives critical to enhancing rural prosperity. Key among these are agricultural undertakings, poor households, and long-term investment.[7]

Importance of social capital. The social capital of a society includes the institutions, relationships, and attitudes and values that govern interactions among people and contribute to economic and social development. Social capital is not simply the sum of the institutions that underpin society: it is also the glue that holds the fabric of society together, and without it economic growth and even human well-being is impossible. It constitutes the shared values and rules for social conduct expressed in personal relationships, trust, and common sense of civic responsibility that a society more than a collection of individuals. Without a degree of common identification with forms of governance, cultural norms, and social rules, it is difficult to imagine a functioning society (World Bank 1998).

Social relationships influence how markets and states operate, and in turn are influenced by those markets and states. Reliable, stable relationships among actors can enhance the effectiveness and efficiency of both collective and individual action. Social capital can be strengthened, a process that requires resources. Social relationships have positive public characteristics, but there tends to be under-investment in maintaining and improving them. Hence there is a case for public support of social relationships and institutions (World Bank 1998). In Mexico, access to social capital in the form of agrarian institutions was found to be highly beneficial to agricultural income. What mattered for poverty reduction was the complementarity between access to land and (public) institutional development to help achieve more productive use of land (de Janvry and Sadoulet 2000). Future interventions to increase participation in the rural economy should give increased attention to the role of farmer and other rural organizations ensure they serve as pro-poor social assets in the income generation equation.

Ethnicity has a high income cost. In the Mexico *ejido*, ethnicity was found to lower farm income in the lowest half of farm sizes by 19 percent (de Janvry and Sadoulet 2000). Much rural poverty in the LAC region is tied to indigenous populations. Lack of empowerment or victimization, in general, is a common description of the state of the poor. Increasing their incomes will help

[7] The preceding discussion of credit, finance, and financial markets draws heavily from the referenced Gonzalez-Vega paper (2001).

increase their protection against victimization. However, empowerment of the poor may be necessary to ensure their participation in economic growth, even in pro-poor growth scenarios. Existing institutions (social capital) tend to be run by old era power structures and may be biased against, or even antagonistic toward, the poor. Efforts to organize and otherwise empower the poor to achieve inclusive growth often requires direct intervention from central governments or outside agents with the interests of the poor at heart. Non-governmental organizations are often appropriate in this role (Mellor 2000).

One of the most interesting examples and important roles of social capital is in the reduction of transaction costs for access to rural finance. Without the accumulation of "reputation capital" and the trust developed through long-term connections between intermediaries and clients, it would most likely be impossible to make these services available to the rural poor. In the first instance, most of the rural and microfinance organizations themselves are built on trust and a sense of social obligation. In the second, the services would either not be available due to the lack of alternative guarantees or would be available at a cost prohibitive to the poor.

Another interesting example of social capital is in the form of "membership" in migration networks. In Mexico, this was found to be the key for success for families receiving remittance income. Networks serve the function of providing information about how to migrate, help find employment in the United States, and provide assistance to cover costs (de Janvry and Sadoulet 2000).

Accumulation of assets. People gain assets in several ways: by diverting income from consumption to savings; by diverting effort from income-generating activities to "sweat capital"-type activities or attending school; by inheritance; and, by appreciation of assets held. Theft and fraud are also ways people gain and lose assets. Much income and work are committed to meeting basic consumption-type needs and obligations, and inheritances are small and rare. The poor are therefore hard-pressed to gain assets.

Unfortunately, the poor readily lose assets in hard times when they must sell or mortgage to meet basic needs. Assets are also lost by physical depreciation, environmental depletion or pollution, and asset sale for consumptive purposes. Being subject to high uncertainty in the absence of adequate insurance mechanisms becomes a restriction to acquiring more assets. Under these conditions, when the poor do save, their vulnerability leads them to put their savings into assets that are low-yielding and highly liquid, or into non-yielding buffer stocks. They invest less in human capital and in generating more income (IFAD 2001). The existence of insurance mechanisms and a stable environment act in favor of a more equitable accumulation of assets over the long term.

Actions to build up assets are essential to rural prosperity and rural poverty reduction strategies. The asset positions of the poor are highly varied. Geographical locations vary greatly in terms of natural assets and other physical assets, including roads, electricity, and irrigation, as well as in human and social assets. There are also cross-linkages between assets that must be accounted for in strategies aimed at increasing access to assets or building up asset stocks. When more assets are owned, the opportunities for increasing the productivity of all assets are enhanced and,

therefore, there are more opportunities for the accumulation of additional assets. For example, land has a much higher return when combined with human capital.

The high degree of variability in asset positions means that it is impossible to create a single blueprint for building up the assets of the poor. Actions must be geared to the situation in which the poor find themselves. Although interventions are commonly viewed from the supply perspective, there is a demand side as well. Without the participation of the target population, what is supplied may not match what is needed. For example, a school may be provided when there are no teachers, when what is really needed is a road so students can access existing education at nearby facilities. For many environmental assets, local collective action is the key to preventing degradation or carrying out successful recovery and conservation. Seeking a balanced expansion of demand and supply of access to assets by the poor through a partnership of the state, private sector, and the poor themselves is most likely to produce a successful approach.

Opportunities for accumulation of human capital have been uneven in LAC countries, as measured in terms of progress in the coverage, level, and quality of rural health and education programs. Some countries are still struggling to provide rural children with the opportunity to complete six years of primary education, while others have a goal of providing full access to a four-year secondary school education to rural youth (Echeverría 1998). Furthermore, quality matters with respect to education — and the quality of rural education in the LAC region is lower than that found in urban areas. Children from poorer families and disadvantaged ethnic groups tend to access schools with the lowest scores for student achievement, while the rich generally attend the higher scoring schools. In addition, school curricula typically do not take into account the specific needs of rural students. The effects of family background on attainment can be significant; to accumulate human capital, it is often necessary to overcome constraints beyond those directly related to income.

4. Vulnerability Management

The environmental and economic risks inherent to the region often set back progress on economic growth and prosperity, and these shocks disproportionately affect the poor. The following discussion explores ways in which economic shocks on the poor could be avoided and better mitigated against and on enhanced disaster prevention and mitigation practices.

a. Economic Vulnerability[8]

The discussion that follows describes the economic vulnerable position of the rural poor in Latin America within an increasingly integrated global market place. As such, it focuses on the role of economic risk and uncertainty faced by the rural poor in markets, and on how institutions and policies can ameliorate the economic vulnerability of the rural poor as they seek to enhance the quality of their livelihoods.

Defining economic vulnerability for poor rural households. For the purpose of this discussion, risk is the probability that the outcome realized from a given decision will differ from the

[8] David L. Franklin prepared the following summary. References cited here are provided in Annex IV.

expected outcome to such a degree that it has a palpable effect on the livelihood of the poor rural household, as such risks are measured. A risky outcome can differ positively or negatively from the expected outcome, but the connotation of risk is usually one of unexpected loss rather than gain. Risk and uncertainty affect the valuation of the household's activities, whether or not the household actually participates in any market; markets determine the opportunity value of any human activity, including so-called subsistence activities (Franklin and Harrell 1985). Economic vulnerability means that the value realized by the market for the products, inputs, or labor efforts of the rural poor differs sufficiently from the expected value so as to cause unavoidable, irreparable damage to the livelihood of the poor rural household.

The poor are vulnerable to risk or uncertainty because they have meager assets and livelihoods that can be easily devastated by natural or economic shock. Economic vulnerability means that an economic shock may place the poor rural household in an irreparable state that could threaten the essence of its livelihood (that is, loss of food security or earning power). The rural poor in Latin America often live in precarious conditions, such as fragile environments (e.g., the Altiplano, jungles, or tropical savannas) and in areas with poor linkages to markets (subsistence production with few alternative employment opportunities). In these difficult conditions, economic vulnerability means that the basics of life can be easily compromised for all or at least some of the household's members. Economic vulnerability also implies that compromises to the basics of life — that is, food, shelter, and health — cannot be avoided through a reliance on markets (by borrowing, for example) or reliance on institutions (e.g., social safety nets).

Given the precarious nature of rural life, it is rational for decision makers in poor rural households to assume that deleterious outcomes are likely in the presence of uncertainty. It is not a preference for risk that is at issue in the decision making of poor households; often, the problem is the lack of information with which to calculate risks. In the presence of uncertainty or risky outcomes, poor households will tend to under-invest in productive inputs in any given economic activity (Holthausen 1975). In this manner, economic vulnerability affects current conditions of human well-being, while also serving to impede investments in human and other capital. Economic vulnerability damages both the current and future livelihoods of poor rural households in Latin America. Simply put, it is not that rural people are more risk-averse than urban dwellers; rather, rural life is inherently riskier and more uncertain than urban life — and this vulnerability is a major barrier to prosperity.

The following discussion concentrates on the economic vulnerability that arises from the performance of markets that determine the value received by the rural poor for their efforts, or determine the availability and cost of basic consumption goods and services and factors of production used by poor rural households.

Sources of economic vulnerability. For the framework of this discussion, poor people are compensated for their efforts by the market valuation of the products and services produced, whether they sold in markets or used within households. This framework treats poor households as pluri-active firms that engage in numerous activities, including producing goods and services for sale in markets, selling labor services outside households in local, regional, or international labor markets, and producing goods and services for consumption and investment within households. The goods and services produced within a household in a given period of time may

be consumed; alternatively, they may be invested in human capital or augmentation of other assets that will be embodied in future output by the household as products or labor services. It is the excess or shortfall of a household's current output over basic consumption needs which results in augmentation or depletion of its stock of human and other capital.

The sources of variation in market valuation of goods, services, and assets that matter within the context of economic vulnerability, as defined above, are those that are unexpected, abrupt, and large. In Latin America the world prices of traditional products have faced long-term declining trends and significant periodic variation. Efforts at diversification into non-traditional products have often produced important and secure improvements in rural livelihoods, but not always.

The principal sources of economic vulnerability for rural poor in the region tend to be the consequence of domestic policies and institutions that have impeded markets from performing their signaling and resource allocation functions. For example, some countries still use input subsidies as development instruments — for example, cheap energy, seeds, fertilizer, or irrigation water. The rural poor, often excluded from political and social participation and with meager assets and inadequate information, are seldom able to capture rents from subsidies or avoid the taxation implicit in artificially low prices. Even if they do manage to capture certain benefits from distortions, they become vulnerable once the distortions disappear, since such interventions are seldom sustainable.

Additionally, interventions to help the poor in specific markets often lead to fiscal deficits, which must ultimately be financed through inflation or financial repression. These economy-wide effects almost always amplify disruptions to product and factor markets in which the rural poor are most active. When the inevitable adjustment takes place, product and factor markets can be destabilized to the point of dangerously aggravating the economic vulnerability of rural households. One of the collateral benefits of globalization and broad-based free trade agreements like NAFTA and the FTAA is that they create pressures for convergence of macroeconomic policy among countries, eventually leading to reduced economic vulnerability for the rural poor in the region.

Economic vulnerability is also frequently produced or aggravated by direct public interventions in production and marketing decision making, such as forcing farmers to use specified marketing channels for certain products or applying pressure to achieve technological or product shifts to respond to apparent market opportunities. Even well-meaning interventions that seek to isolate rural entrepreneurs from risk tend to reduce opportunities and weaken the ability to augment human and physical capital.

Another important source of economic vulnerability is tenure insecurity over assets like land and other user rights — for instance, water rights. These sources of vulnerability date to archaic concepts of property and inadequate systems for registration and conveyance of rights. As a result, assets used by the poor can seldom be employed as collateral for credit or serve as the basis for risk-sharing arrangements with potential partners (De Soto 2000). In countries like Mexico, reform of communal land holding has been partial, limiting the ability of small farmers (*ejidatarios*) to enter into profitable smart partnerships with larger firms.

Strategic priorities to ameliorate vulnerability. A rural prosperity strategy based on enhancing the forward and backward linkages of rural enterprises with the global economy can reduce the economic vulnerability of the rural poor if interventions and innovations are reliable, credible, and sustainable. To achieve sustainability, the strategy must promote market-based enhancements to links between rural enterprises and the global economy. While each element of a link involves risk, risk can be measured and reduced by risk-bearing and -sharing mechanisms introduced through market-oriented institutional arrangements.

An approach focused on risk-taking emphasizes the key role of entrepreneurship in penetrating high-value markets and meeting their demanding requirements with high-quality factors of production, including skilled workers and modern inputs and technologies. This approach underscores the importance of mutual private sector cooperation to ensure the provision of support services — including collective risk-bearing and -sharing mechanisms — as well as the existence of an enabling policy environment free of induced risks. Both as workers and entrepreneurs, the rural poor generate products with risks and uncertainties all along product marketing, logistical, and distribution chains. These risks extend to forward and backward linkages, including backward linkages involving input supplies, modern technologies, and, at times, the output of other agricultural enterprises. The essence of entrepreneurship is to calculate such risks and innovate and successfully produce within the context of that risk.

The challenge will be to provide developmental initiatives that enhance the ability of poor rural households to perceive and measure risks, as well as initiate and maintain policies and institutional arrangements that, at the minimum, avoid inducing further risks. In addition, it is important to foster market-oriented mechanisms for pooling and bearing economic risks, as well as creating sustainable safety nets for coping with the economic and natural uncertainties that cannot be addressed through market-based mechanisms.

Guatemalan Coffee - A Market Solution to a Market Crisis

Central America is experiencing economic shocks due to the fall in Coffee prices. In response to this crisis, USAID/Guatemala is working with ANACAFE and the Specialty Coffee Association of America (SCAA) to increase sustainable incomes for rural coffee farmers by concentrating efforts on the origin and quality of the coffee grown. This multi-sector program focuses on producers working at over 1,100 meters, the minimum elevation for high-quality coffee beans, and involves the establishment of regional identities through the registration of appellation marks, access to technical assistance, technology improvements at the mill level, innovative marketing schemes such as internet auctions and the identification of diversification alternatives for un-productive farms. As a result of this program over 38,000 small farmers have taken advantage of extension services, 38 wet mills were constructed, and the average quality of marketed Guatemalan coffee has increased dramatically.

In addition to benefiting from truly neutral policy frameworks, the rural poor gain from the provision of public goods that cannot be appropriated by the rich. Public and institutional services for rural entrepreneurs, including accessible information systems and transparent regulatory environments, will help reduce economic vulnerability. Institutions such as market news and information systems and weather and climatic information, among others, are the types of public and institutional interventions that help entrepreneur measure and manage risk.

A new era strategic approach should support governments in identifying such opportunities and developing the means to supply appropriate public services over time. Timely and reliable

information on all aspects of rural enterprise linkages can be an important service, suitable for public or collective provision. Information on prices and trends in different markets for different products is another valuable service. Collectively administered systems of products, grades, and standards can enhance the value of market information. Information on transportation schedules, rates, and conditions is also important for global commerce. Each node in a forward and backward linkage for a given cluster of rural enterprises can be assessed for its potential role and impact as part of an information service product collectively sustained by users as a public or quasi-public service.

A forward-looking rural prosperity strategy and its constituent elements should avoid picking winners, whether sectors or firms. The strategy should support public-private dialogue to promote and sustain economy-wide flexibility in financial markets — macroeconomic stability and fiscal prudence, with a trade regime characterized by low, uniform, and simple tariffs and a minimum of trade-distorting non-tariff barriers. These measures will ameliorate much of the policy-induced vulnerability the rural poor have faced as a consequence of domestic rules assigning privileges to urban elites.

The key to success is to recognize the central role played by rural households as risk-bearing entrepreneurial firms, and to develop interventions and proposed actions with the full and informed participation of the rural population in planning and implementation. Market-oriented business associations of rural enterprises have a vital role to play here. Indigenous nongovernmental organizations are another effective vehicle for providing support to enhance participation by the rural poor. To avoid increasing vulnerability, such associations and organizations must be sustainable through autonomous means, lest a dependence on USAID support results in increased rather than decreased vulnerability.

b. Environmental Shocks and Latin America's Rural Poor[9]

At least as much as in any other part of the world, natural disasters are a prominent feature of the Latin American environment. Every year, hurricanes and tropical storms sweep in from the Atlantic to the Caribbean Basin, destroying property and causing lives to be lost. Less frequent, but no less damaging, are *El Niño* events linked to the periodic warming of surface waters in the Pacific. In addition, seismic activity is intense in the Caribbean and along the Pacific Coast, with volcanic eruptions and earthquakes occurring from Chile to Colombia as well as in Central America and Mexico.

While the consequences of environmental shocks are pervasive, affecting every economic sector, the economic toll in the countryside is especially severe. More than other kinds of productive activity, agriculture depends on climate. Farmers sow their fields expecting precipitation to fall within a normal range. If too much or too little rain falls, an entire season's output can be lost. If this happens, farmers cut back on purchases in nearby towns, which also experience a decline in commerce because less agricultural production is being processed and marketed. Likewise, suppliers of farm inputs see their sales contract.

[9] The following discussion of environmental shocks was authored by Douglas Southgate.

No part of the rural population is as exposed to environmental shocks as the rural poor. More than anyone else, this group is concentrated in fragile settings where the incidence of acute storm and seismic damage is high. As World Bank economist Hans Binswanger has documented in studies carried out in Colombia and a number of other places, the disadvantageous location of poor small farmers has much to do with public policy. To be specific, arrangements like favorable tax-treatment of agricultural income and periodic debt relief for the owners of large agricultural holdings contribute to an unequal playing field in the competition for prime farmland. Consistently outbid in this competition by wealthier individuals who value tax breaks more than other rural dwellers do and who are the first to receive credit on concessionary terms, small farmers are relegated to hillsides, floodplains, and other inferior settings where there is high exposure to environmental shocks.

The toll that natural disasters take on the rural poor not only has to do with the damage of floods, erosion, and landslides to their own farms. These people earn a major portion of their income by working on the agricultural holdings of other people. If these holdings suffer earthquake or storm damage, or if the cost of marketing output rises because roads and bridges have been destroyed, there will be a cut in employment. Poor households can easily lose a large share of their meager earnings as a result.

The consequences of the earthquakes that struck El Salvador in early 2001 are a case in point. Already diminished because of the drastic decline in prices that had occurred since 1997, coffee production was further reduced after heavy tremors left much of the country's rural infrastructure in ruins. Realizing the increased expense of getting output to markets, where it would in any event fetch lower prices, coffee farmers cut back on pruning, applying chemicals, and harvesting. This left many rural laborers without jobs who otherwise would have been hired to perform these tasks.

A poor household's dependence on off-farm agricultural employment is a reflection of meager assets, as well as limited access to market opportunities — for example, a location far from a paved road. When employment is lost, the same lack of assets and access circumscribes a household's ability to cope. For many, the best choice among a limited array of possible responses is to increase cultivation of whatever land is available.

Again, El Salvador is illustrative in this regard. With support from the USAID-funded Broadening Access and Strengthening Input Marketing Systems Cooperative Research Support Program (BASIS-CRSP), researchers from Ohio State University and the Fundación Salvadoreña para el Desarrollo Económico y Social (FUSADES) have identified two opposite trends in agricultural land use since the middle 1990s. For farmers above the 80th percentile in terms of income (i.e., the top quintile), farmed area declined by nearly one-quarter from 1995 to 1999, to approximately 0.90 hectare per household. Meanwhile, average agricultural land use in the poorest quintile, which has experienced a sharp decline in earnings due to the loss of off-farm agricultural employment, increased by 50 percent, to just under 0.85 hectare per household.

When agriculture suffers from declining terms of trade or environmental shocks, the land that better-off households stop farming is typically superior to the land brought into production by poor households after they have been made worse off due to the same events. To be sure, the

latter response can ultimately be self-defeating for the rural poor. Diminished economic prospects linked to their lack of assets and access drives the poor to exploit more intensively one of the few assets available to them — land, which is often not particularly productive and subject to erosion and other forms of degradation. As the exploitation of fragile resources increases, their vulnerability to environmental shocks grows more acute. In short, the rural poor are engaged in a destructive cycle that will lead to further poverty and environmental degradation down the road.

The consequences of this destructive cycle are not confined to the rural poor. As they exert more pressure on fragile upper watersheds, environmental services of vital importance can be lost. For example, deforestation in the farthest reaches of a drainage basin tends to make stream-flow regimes more variable. Run-off during and right after major storms increases, which results in more flooding at lower elevations. Furthermore, there is a decline in infiltration and aquifer recharge corresponding to increased run-off, raising the likelihood of water shortages during the dry season.

To summarize, agriculture is more vulnerable to environmental shocks than are other parts of the economy and, within the countryside, the rural poor suffer more from natural disasters than others do. Lacking assets and market access, their ability to cope with storms and seismic activity is limited, which leads them to respond to these events by using fragile natural resources more intensively. This ultimately causes harm to the rural poor, not to mention society as a whole.

Managing vulnerability to environmental shocks. Specialists in emergency management distinguish between two sorts of interventions related to storms, seismic events, and other natural disasters. One category comprises prevention, broadly construed to include insuring against the financial losses of environmental shocks as well as mitigation measures. The other kind of intervention is to respond after an emergency has struck; this is the realm of disaster assistance.

Jamaica Ridge to Reef–Linking Economic and Environmental Vulnerability to Promote Sustainable Development

USAID/Jamaica's Ridge to Reef program focuses on reducing the island's vulnerability to economic shocks and environmental disasters . As a small island nation, Jamaica is vulnerable to many economic factors, including an over-reliance on monoculture agriculture and tourism for significant portions of its economic activity. Ridge to Reef works to reduce the risk in economic terms by promoting crop diversification for farmers, including such alternatives as coffee, peppers, and organic agriculture. In terms of environmental vulnerability, the project works in fragile coastal areas by promoting local governance through local wastewater advisory and monitoring committees. These committees are successful in large part due to knowledge sharing, transparency and meaningful participation in decision making on sanitation issues.

There are trade-offs between one sort of intervention and the other. As more effort and resources are devoted to mitigation, for example, the toll associated with environmental shocks is reduced. Furthermore, it is clear that trade-offs are not being resolved efficiently in Latin America and other parts of the developing world. A report issued in 2000 by the World Bank, "Managing Disaster Risk in Emerging Economies," contains a number of recommendations for improved mitigation, including better enforcement of building codes and clear and consistently applied regulations on construction in floodplains and other risky areas. The benefits of adopting these recommendations are indicated by recent experience in the U.S. Virgin Islands. After Hurricane

Hugo in 1989, which resulted in $321 million in aid from the U.S. Federal Emergency Management Agency (FEMA), the territorial government undertook a program of public education, code-enforcement, roof-replacement, and other disaster-resistance measures. As a result, the damage done by Hurricane Georges in 1998 was much lighter, with FEMA obliged to disburse just $6 million in aid.

As a rule, insurance is not an appealing alternative to mitigation. For insurance to work well, the risks that individual policy-holders incur must be independent of one another. This condition holds fairly well for the case of automobile or life insurance, but not for natural disasters; obviously, individual risks relating to storms and seismic events are highly correlated. To keep insurance funds solvent in the face of this correlation, either policy holders must be charged high premiums or insurance protection needs to be subsidized. Neither alternative is attractive for poor people. Few, if any, of them are able to pay more than a very modest amount for financial protection against natural disasters. In addition, public monies used to subsidize this protection would probably be better spent on something else — on mitigation measures, for example.

Though obligatory, expenditures on disaster assistance are hardly a paragon of efficiency. The waste and corruption that characterizes more than a few Latin American governments often grows worse as aid arrives in the wake of an environmental shock. One brake on this is a free press, which exposes glaring examples of incompetence and graft. Another is an active and independent judiciary for the fair and transparent administration of civil and criminal justice.

With time, the administration of disaster assistance ought to grow more efficient, as the institutions of democratic governance strengthen. Progress toward improved mitigation should occur as well. However, as long as the rural poor are concentrated on hillsides and other fragile settings, they will remain highly exposed to environmental shocks. Part of the solution, then, is to address conditions and laws that relegate them to these settings. Government policies that put them at a disadvantage in the competition for prime farmland need to be reformed. Also, investment in human capital should take place in order for the rural poor to put their marginal economic status behind them — and, not coincidentally, to move away from marginal and hazardous environments.

IV. Strategic Considerations for the Future

As the LAC bureau and missions proceed with the development of their new era framework for promoting rural prosperity, there will be an increasing need for teams to develop a common mindset and perspective. The following summarizes key precepts, conclusions, and lessons learned from development experience, as discussed in the preceding sections of this paper.

A. The Overarching Approach

The evolving development context and the reasons for poverty, particularly the unfavorable enabling environment and asset position of the rural poor, strongly suggest the overarching approach should:

- Be a demand-driven, trade-led economic growth strategy that effectively addresses both the role of agriculture and the non-farm economy, including environmental services, and responds to the challenges and opportunities presented by globalization.

- Target near-term results while changing the dynamics of the enabling environment to make economic growth more inclusive or pro-poor, especially across the rural population.

- Place emphasis on economic governance, by both the public and private sectors, with a focus on the role of government as a facilitator to ensure stable, transparent and predictable macroeconomic policies; rules and regulations to encourage competition on an equitable basis and lower transactions costs, particularly with respect to access to public services and infrastructure; and social policies targeted at enhancing the human capital of the poor.

- Pay explicit attention to meeting the need for effective knowledge management, recognizing the importance of know-how and information across strategic elements to facilitate rules of trade that promote growth with broader participation, innovative uses of science and technology, asset growth, and improved risk management.

- Be an economy-wide approach that enhances rural prosperity in a non-exclusionary manner. It should not be exclusively geared to rural development, agricultural development, or poverty reduction. Rather, it should be a *livelihood approach*, targeting farm and non-farm opportunities, that attacks the reasons for poverty and takes advantage of opportunities wherever they are found.

- Target interventions that will significantly expand the rate and extent of integration of the rural poor into the economy. It should address issues of heterogeneity that can exclude sub-sets of the poor while working across the following areas of action: rules of trade and market access, science and technology, access to assets, and vulnerability management.

- Recognize that the scope and nature of the challenge of promoting broad rural prosperity in comparison to the limited size and nature of USAID funds means that targeting our assistance to feed into and build on the work of others is essential.

- Finally, as with all strategic exercises, there is the need for a realistic vision of future objectives, based on a firm understanding of the role USAID assistance plays within the myriad of actors and resources affecting rural prosperity. Accurate cost-benefit analysis, effective partnering, and precise targeting are all essential.

B. Guiding Precepts and Conclusions

The following lists specific points that emerge from the discussion earlier in the text that are believed to be particularly appropriate for guiding strategy development within the overarching framework set forth above.

- All constraints to reducing poverty — and all points of entry for attacking it — are not created equal. Reaching all of the poorest people in the LAC region with productive interventions — and LAC's poorest people are, almost by definition, its most isolated physically — lies beyond budgetary realities. Hard choices therefore must be made.

- Systemic, across-the-board approaches to solving rural poverty problems are often expensive, relatively low probability propositions with high opportunity costs. In many cases, a transactional, problem-solving approach is preferable given the regional and local heterogeneity of rural poverty problems. In some cases, it may be necessary to apply both types of approaches simultaneously. For example, countries are taking step-by-step measures to implement their obligations under the SPS, but doing so within an overall, joint-effort, systemic approach. The balance of systemic and transactional needs will vary by country and should be determined by opportunity and cost effectiveness. However, in any context, centralized and top-down approaches to determining policy and enterprise needs are not wise.

- Tax, tariff, and interest-rate interventions are blunt instruments for supporting different economic sectors or regions. Generally, they distort resource allocation and make it more inefficient. Public policy to promote specific sectors or regions should emphasize appropriate public-good investments to lower transaction costs affecting their competitiveness.

- The time has come to reorient social policies from a poverty-alleviation focus to a poverty-reduction focus, and improve the quality of social services. Investment in human capital is essential for enhancing rural prosperity and reducing poverty over the long run. Indeed, it is an integral part of a strategy focusing on productive sectors.

- In LAC, to permanently reduce the number of people in poverty, economies must grow rapidly for a number of years, ideally at a rate of 8 to 10 percent. For growth to be broadly based, it must be accompanied by interventions that counter market failures, deal with inequities, and target the poor: that is, interventions that make growth pro-poor. An appropriate strategy should affect the enabling environment and facilitate market transactions that will allow more near-term impact on poverty while stimulating long-term growth.

- For LAC countries to achieve a permanent dent in poverty, the productivity of poor people must increase. For this to occur, they must have more capital, both physical and human, to work with. Realistically, poor people have limited capacity to expand physical capital on their own. We need to find ways to link the poor to the non-poor, both within and outside these countries, through jobs, contract relationships, and joint ventures, as well as ways to promote financial democratization.

- Participatory, democratic governance (DG) is essential to pro-poor economic governance and the formation of a rural economy with inclusive growth. Where such governance is lacking, EG and DG programming should be tightly linked, as good

economic governance is important to all four of the thematic activity areas discussed in this paper. For example, it is important to equitable access to assets and to their accumulation; it is also crucial in determining how social capital enters the growth equation to provide, or not provide, opportunities to the victimized poor.

- In LAC, as elsewhere in the world, education has been and probably will always be a major escape valve for the children of the poor. Increased investments in better-quality education are essential for significantly reducing poverty over the long run, supported by sound macroeconomic policies and structural reforms to ensure that demand for educated workers grows in tandem with supply.

- Improving knowledge management is a complementary need and includes widening research networks, capacity building for research and practice, skills training, improved use of ICT, dissemination of best practices, policy dialogue, and testing innovations in addition to continuing to improve access and quality of basic education.

- On the macroeconomic as well as the local levels, a major constraint to development in the poorest LAC countries is the lack of effective demand. As a result, developing connections with outside markets is essential. In other words, LAC countries must export, both externally and internally. The challenge is to develop competitive capacity to supply the demand that exists in broader markets, regionally and globally.

- The place one finds a problem may not be the best place to attack it. As a case in point, targeting the rural economy and the poorest people in rural areas does not necessarily make rural areas always or the only best point of attack.

- In a demand-driven approach, a key requirement for improving the lot of both poor farmers and non-farmers is to identify buyers of what they can produce. A good starting point programmatically is traders, processors, or larger enterprises looking to out-source product.

- If one sees the development process as driven by demand, pitting city against countryside makes little programmatic sense. In fact, urban and rural areas fit naturally together. Demand for rural products is found primarily in cities. Cities drive rural development. Agricultural production takes place in rural areas, but the income and employment generated extend far beyond the farm. From both demand and supply perspectives, it is time to break down artificial conceptual barriers between these two supposedly distinct economic domains.

- Geographic programming — for example, focusing on economic corridors or secondary cities — is a good approach for linking supply to demand and the poor to non-poor on a local or regional basis. It is also a good mechanism for exploiting synergism among alternative development or economic growth activities and education, governance, environment, and health programs.

- Poor small farmers move out of poverty only when they diversify out of basic grains — that is, when they move out of low-value into high-value crops.

- Migration is not a bad thing. Addressing some of the asset access issues relevant to farm/rural opportunity, will facilitate better-paced, positive migration. Migration capital, especially education and training, is important as migration more readily engenders upward mobility.

- Finally, either commit to the long term or risk not having a significant impact on growth and poverty reduction. The needed policy and institutional changes will take time, perhaps as long as ten years to both put into place and to produce the desired impact for a substantial portion of LAC's rural poor.

C. Opportunities for Effective Partnering

USAID/LAC has solid and expandable links with US private sector, US Government partners (USDA, USGS), universities, and PVOs (compatible with the G-bureau's Partnership for Food Industry Development, Title XII, and GDA). The action areas discussed herein are also identified (even if labeled somewhat differently) by other donors for expanded attention and are areas for which the US Government can offer policy leadership and leading-edge technical assistance and that means that USAID's scarce resources can be instrumental in shaping a coherent rural strategy for the countries we assist. USAID is joining an Inter-Agency Working Group on Rural Development, which will facilitate better coordination of efforts and effective partnering.

Many examples can be found to illustrate how incorporating the tools and approaches of our other mission teams can bear on the objectives of rural economy:

- Our democracy programs are highly relevant: strengthening civil society is essential to finding the right policy and practice mix that will work in any particular context, and economic governance requires extending the rule of law and administration of justice into civil and commercial arenas.

- Rural health and education are necessary for productivity enhancement and also contribute to the quality of migrants moving to urban areas.

- There is strong potential for collaborating with Mexico as a NAFTA partner under Mexico's new initiative to support progress in the Central American Isthmus, "Puebla to Panama."

LAC's economic growth strategy is complementary to and consistent with the evolving EGAT strategy theme of *harnessing a new science for a new agriculture*. We should be sure to follow EGAT's strategy and tap into it.

D. Summary and Conclusions

Assisting countries in improving rural enterprise competitiveness and reducing inequity in access to assets will promote broad benefit from the FTAA, enhance the stability of nascent democracies, and contribute to the reduction of persistent poverty and hunger in the region. Investing in the rural sector in LAC is both good business and smart policy. It allows us to seize new opportunities in regional trade, linking the poor with non-poor and keeping migration a prosperous process; it also contributes to political stability. With its in-country presence and quality network of partners, USAID can play a major catalytic role in shaping new era rural sector economic investments. By energizing and nurturing investments in new institutionality, new science, and improved practices, USAID can help countries make competitive advantage out of comparative advantage and promote a virtuous circle of growth with poverty reduction.

USAID/LAC already has had experience that shows the viability of the suggested framework. These experiences have been provided through supplemental funding opportunities; these include alternative development programs in Colombia, Peru and Bolivia, the peace program in Guatemala, and a variety of efforts implemented on a pilot basis. For example, producers need assistance to identify and gain access to diverse, small niche markets — for example, organic produce, eco-certified timber, and medicinal plants — and they need government to facilitate, not hinder their commerce.

USAID/Guatemala's reflections on the promotion of non-traditional agricultural exports (NTAE) illustrate this point well. During the 1990s, with USAID support, tens of thousands of Guatemalan indigenous people were able to move out of poverty by diversifying their production. Net income from NTAE in the highlands is on the order of 15 times as profitable and on average uses 50 percent more labor per hectare than corn and beans. This positive experience showed us ways in which a lack of marketing channels, knowledge gaps, and poor governance serve as constraints to rapid expansion of NTAE. Private exporters must be able to operate in an encouraging, stable, and predictable environment. Private-public partnerships between U.S. buyers, local exporters, local NGOs, and small farmer groups are essential to ensure a flow of improved technology and to meet changing phytosanitary rules in developed countries.

A recent example from Honduras illustrates how our work with larger, commercial farms has also been important. These farms create jobs vitally needed by poor land-scarce and landless households — and they have increasingly entered into joint ventures that can help resource-poor farmers' access inputs and product markets. As part of its Hurricane Mitch reconstruction assistance, Fintrac, Inc. (a U.S.-based contractor) worked with the Center for Agribusiness Development (CDA) to increase small farm income and increase exports. While most of the clients are micro and small farm enterprises, larger companies have been involved as producer/exporters and processors buying from smaller growers. The assistance targeted the market system rather than specific products, linking local growers with upstream value locally, regionally, and internationally.

Results have been impressive, with average increase of 19 percent in local sales, average export sales increase of 31 percent, and average increase in employment of 45 percent. These averages include some outliers of super-success (e.g., 245 percent increase in local sales of melons) in the south, and of loss (43 percent of tobacco exports in the west.) Even in the west, CDA service is

allowing rapid adaptation to a market decline and expectations are good for trends in sales and employment through new crops like jalapeño peppers. Also, the reach of the project goes beyond the immediate time frame and grower clients — for example, employment in Chestnut Hill Farms' Honduras enterprise is estimated at more than 1,000 and the impact of fruit tree investments will take time to develop.

These positive experiences show us that removing constraints in marketing, knowledge, and bureaucracy can be very effective. Private exporters must be able to operate in an encouraging, stable, and predictable environment. Private-public partnerships between U.S. buyers, local exporters, local NGOs, and small farmer groups are essential to ensure a flow of improved technology and to meet the increasingly rigorous agricultural, health, and food safety standards of developed countries. These types of investments have started to pay off despite the lack of overall competitiveness. Much more impact could be achieved if trade capacity and competitiveness were improved and the adverse effects of natural and economic shocks — which disproportionately affect the poor — were reduced.

In sum, this new framework envelopes some old things in a new package with new era institutionality and science. It recognizes that poverty and food security constitute political and economic obstacles that LAC needs to overcome, and that these are essentially problems of inadequate earned income. It recognizes that constraints in the enabling environment lie in the arenas of international trade and domestic economic and social policy. It reflects the need for adaptivity in an evolving rural economy and the role of science and technology. It recognizes that continued inequity is a lose-lose proposition. Essentially, the story is simple — growing economies and improving living standards for all segments of society means expanding access to markets, to know-how and other productive assets, and to infrastructure.

Woods (1989), speaking of America's role in global development, mentions in addition to our science, education, humanitarian, and charitable contributions, "…most of all, the growth oriented example and wealth-generating dynamism of the American economy itself." It is interesting to know that our own "take-off" in the United States to achieve sustainable growth with poverty reduction occurred in a market opportunity niche — the great economic boom in the aftermath of war. The process was facilitated by a strong base of good governance and a heavy emphasis on creating the foundation for sustaining competitive, broad-based rural economic activity, including rural education, broad land access, rural finance, and agricultural sciences.

Rural Prosperity White Paper: *Rules of Trade and Market Access*

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Introduction

Poor people in rural Latin America are poor because the market value of their assets (human capital, physical capital and financial capital) is low and because their opportunities to augment these assets continue to be low, as well. As a result of these conditions, the returns to investments by the poor in their human and physical capital, including technologies to augment the productivity of these assets, has remained low. The rural poor are also faced with recurring natural and economic shocks that tend to deplete the stocks of their meager assets or to lower the value of the output generated by rural families in seeking their livelihoods. The topic for this essay is the role of "Rules of Trade and Market Access ", within an increasingly integrating global market place, in creating opportunities for improved livelihoods of poor people in rural Latin America. As such, it focuses on the role of economic incentives (markets, institutions and policies) in determining the opportunities for augmentation of human and other capital by poor people to enhance the quality of their livelihoods.

As poor people seek to improve the basis for their livelihoods in the context of meager assets and limited market opportunities in the face of uncertainties of nature and economic conditions, they are often limited in their choices. Yet their choices are optimal responses to the opportunities, constraints and risks that they perceive given their experience and the available information in the relevant markets (labor, inputs and products). This essay addresses the potential for policies and institutional arrangements regarding the "Rules of Trade and Market Access " under the WTO and FTAA initiatives, as well as other ongoing processes for global and regional market integration to improve the incentives for asset augmentation by poor rural people in Latin America. Such asset augmentation is the basis for future prosperity and improvements in the quality of the livelihoods of poor rural people in a sustainable and secure perspective. The essay is, therefore, centered on rural households where family members seek to improve the quality of life for themselves and the other members of the household (including children) in terms of their current and future well being. This view recognizes that this quest for well-being is dynamic and involves multiple economic activities by members of poor households, including the augmentation of human capital through nurturing, educational and health activities, other household production activities, participation in labor markets (local, regional and international), and in the production of goods and services for sale in markets (this includes as an important subset the production and sale of agricultural products or their derivatives). The framework for the essay is to assess the potential for "Rules of Trade and Market Access " to enhance the opportunities for poor rural people to achieve higher and more secure returns in each of these

multiple (livelihood) activities–household production, labor force participation and production for markets. These higher returns are necessary for asset augmentation and, thus, for prosperity.

Rules of Trade and Market Access Effects: A Definition

For the purposes of the "Rural Prosperity White Paper" and this essay, *"Rules of Trade and Market Access " are defined as the set of policies and institutional arrangements in domestic and international markets that would cause the actual or potential economic value of activities by poor rural persons (as entrepreneurs and/or workers) to diverge from the value that might obtain in efficient markets without policy or institutionally induced distortions.* While these latter (efficient markets) conditions seldom obtain fully in practice, they can serve as a norm for judging progress from a more intervened set of market conditions to one where fewer policy and institutional interventions affect the allocation of resources and the movement of goods, capital and persons across space and time. The policies and institutional arrangements of interest may be those of the domestic economy in which the rural household operates, those of countries with the potential to serve as destination markets for the products that embody the value generated by poor rural households and/or transnational arrangements such as the WTO and FTAA.

The policies and institutional arrangements of concern include explicit trade policies of LAC countries as they trade with each other and with the rest of the world, as well as the myriad of other policies and institutional arrangements that affect the composition of output in an economy and the relative incentives between exportables, import substitutes and non-traded goods and services. This latter can involve domestic or international sanitary and phyto-sanitary regulations and standards, product labeling requirements, registration and sanctioning regulations for firms and professionals in specific sectors, systems for registering and enforcing rights to intellectual and other types of property, contract enforcement, investment regulations, export promotion and specific programs to foment the development of specific sectors within economies, etc. While macro-economic and financial policies and institutional arrangements can have important and sometimes dominant effects on the volume, composition and vocation of an economy's output, this essay does not address these unless they have a proximal nexus with the output that directly embodies the value generated by the rural poor.

Some of the specific rules of trade and market access that are addressed include:

1. Domestic Import Tariffs on Inputs or Equipment
2. Reference Price Mechanisms for Intra-regional Trade in Food Commodities
3. Domestic Food Safety and Phyto-sanitary Standards
4. Rich Country Food Safety and Phyto-sanitary Requirements
5. International Standards Organizations
6. Domestic Customs Valuation and Administration Practices
7. Compliance with WTO Commitment
8. Trade-related Intellectual Property Rights

9. Trade-related Investment Measures

How Rules of Trade and Market Access Relate to Rural Prosperity

Within the framework for this essay, poor people are compensated for their efforts by the prevailing market valuation of the products and services produced, whether these are in fact sold in the market or used within the household. This framework treats poor households as "pluri-active" firms that may produce goods and services for sale in the market, may sell labor services outside the household (including local, regional or international labor markets) and also produce goods and services for consumption and investment within the household. The goods and services produced within the household in a given period of time may represent consumption or investment in human capital (or augmentation of other assets) that will be embodied in future output by the household (as products or as labor services). It is the excess or shortfall of the household's current output over the consumption for basic needs that creates the opportunity (or need) to augment (or deplete) the household's stock of human and other capital.

"Rules of Trade and Market Access " affect the valuation of the households activities whether or not the household participates in any market directly linked to the global economy. In fact, the more isolated a household appears from global economic forces (international prices)[1], the more it has been affected by distortions in the "Rules of Trade and Market Access ", not less.

"Rules of Trade and Market Access " can affect the prices (or wages) received by poor households for their effort as a result of direct or implicit tariffs or subsidies to the goods produced by the households or the goods produced by the firms (or other households) to which the poor rural households sell their labor services as wage workers. For example, subsidies to basic grains in rich countries cause excess supplies (in the subsidizing countries) that are then sold in world markets at lower prices than would prevail in the absence of such rich country subsidies to basic grains. Farmers and their workers in poorer countries who produce or would have produced such commodities face lower prices (value) for their actual or potential output or work effort. Alternatively, the output of poor households or of the firms that employ poor rural people as workers may face protective tariffs in countries that might otherwise import such output. The result is the same, the opportunity value of output and thus of labor effort by the rural poor is made lower by the "Rules of Trade and Market Access " that induce divergence of market prices from those that would prevail in a less intervened set of conditions.

[1] The author accepts as given that Globalization of Markets that results from the removal of impediments to trade leads to convergence in the factor prices as posited by the factor price equalization theorem; such convergence does not imply convergence of incomes or income distributions across borders, however. As such, globalization based on removal of trade distortions is good for the poor because it creates opportunities for asset augmentation by the poor, but should not be expected to compensate for inequalities arising from prior exploitation or from persistent social distance among groups within countries.

"Rules of Trade and Market Access " affect the value of poor households' assets in many indirect ways, as well. Distortions, such as the direct tariffs and subsidies described in the preceding paragraph can affect the prices of substitutes or complements of goods produced with poor households' effort and of inputs that complement or substitute for human effort in the production of goods and services. This latter effect alters the productivity of labor and therefore of earnings of poor persons whether they act as entrepreneurs or wage workers.

In addition to these direct or secondary market effects of the tax and subsidy mechanisms imbedded in the "Rules of Trade and Market Access ", there are numerous other indirect effects that manifest themselves as economy-wide distortions to the rates of exchange between domestic and international resources and as so-called non-tariff barriers (NTBs). In this essay, we will not address economy-wide effects on the real exchange resulting from "Rules of Trade and Market Access ", although these often have large negative effects on the well-being of the poor in rural areas (Franklin and Valdés, 1993). We will emphasize NTBs because they remain as a major and as yet relatively unattended area for action in the context of rural prosperity. While there has been substantial progress in most Latin American countries regarding economy-wide and sectoral economic liberalization and some countries have gained substantially from regional "free trade" arrangements, most countries are stilled burdened by significant non-tariff barriers in their own "Rules of Trade and Market Access " and they face significant NTBs from their regional and extra-regional trading partners. As a result poor rural households continue to be excluded from the opportunities of globalization, in spite of significant expansion (and diversification) of global and regional trading by the countries in USAID's LAC Region.

Effects of Globalization and Regional Trade Pacts

Globalization of trade and the international division of labor that is emerging as a result of lower barriers to the movement of goods, capital and people is intrinsically good for the rural poor of Latin America. Much of the poverty that persists in all sub-regions of the western hemisphere is a consequence of exclusions to poor people from participating fully in product and factor markets, domestically and internationally. While there are many socio/cultural dimensions to such exclusions, and these have long and deep historical roots, economic exclusion has been the result of policies and economic governance that have been persistently biased against the assets and capabilities of poor persons in rural areas. For example, the bias against agriculture imbedded in the import substitution and industrialization (ISI) policies has been well documented (Franklin and Valdés, 1993).

ISI policies had an urban bias because consumers and workers were located near urban centers, and it was logical to establish the protected industries near urban centers. The subsidies and protection to these industries also created a bias against domestic resources as inputs, particularly labor and domestic agricultural products. Furthermore, the structure of protection created rents to the factors employed in the ISI enterprises, and these rents had to be rationed by the State. Such conditions led to explicit or implicit political alliances between urban labor unions, employers and bureaucrats to preserve the privileges created by the ISI policies. These alliances also created pressures to concentrate public services and public investment in urban areas. Together, the ISI

policies and the provision of public services to urban centers at subsidized rates led to stagnant productive output and fiscal imbalances that were unsustainable. These latter led to public indebtedness and inflationary finance. These were the roots underlying the "lost decade" of the eighties.
Casual observers often incorrectly associate the process of globalization with the adjustment consequences of the stabilization and trade liberalization processes which the countries of Latin America would have ultimately had to adopt, regardless of globalization, because they could no longer afford the heavy burden of their urban-biased development policies. The rural poor had benefitted from the ISI strategy only by migrating out of rural areas into the shanty towns (tugurios, favelas, pueblos jovenes, colonias, invasiones, etc.) around the urban centers. There they could sell services and some goods to the urban elites and hope to someday be served by the subsidized water, electricity and other public services. The collapse of ISI from its own inefficiencies and the fiscal crises that accompanied this collapse led to macroeconomic crises and eventually to massive adjustments which had severe effects on the now dislocated rural poor who had become urban poor.

The incorrect perspective on the inexorable integration of global markets expressed itself in the riots in Seattle in 1999. Rural and urban poor will benefit from further globalization if it is based on market-based rules for the allocation of resources. The rich countries of the norther hemisphere have aging populations with massive purchasing power. The sources of this wealth are, now, primarily based on technologies which are intensive in human and financial capital. There exist myriad opportunities for poorer countries with their younger populations to supply the increasing consumption demands of the wealthy residents of the North.

The role of market-based rules of trade and access under the WTO and some of the regional trade arrangements is to enable efficient divisions of labor through "smart partnerships" between large and small enterprises across borders to produce and deliver the goods and services required by the affluent northern populations. This requires meeting market demands for product and service quality characteristics in the volumes and at the times demanded by the market. the rural poor will need help in understanding and responding to these new opportunities, but significant barriers to their full participation still remain. It is not "globalization" that is excluding the rural poor from prosperity, it is that too much of the process of linking markets remains hobbled by a view that trade is a zero sum game. For example, in Latin America, many of the existing trade pacts, such as the Andean Pact, The Central American Common Market and even Mercosur have been organized to distribute access to markets as if these were of fixed size. In fact, several of these intra-regional trading arrangements evolved as instruments of the ISI policies, e.g. the Andean Pact. As such, they are burdened with many vestiges of the past, and they are impediments rather than vehicles for true market liberalization and globalization. Fortunately, the USA led Free Trade Area for the Americas offers opportunities to overcome these interventionist legacies.

Economy-wide Competitiveness and Enterprise-level Competitiveness

The countries in the LAC Region face globally determined prices in all markets (price takers) whether the particular market is cartelized or not, because no single country can affect the world

prices for the goods in which it trades (imports and exports). Even in commodities like coffee, cocoa and bananas in which individual countries have dominant market shares, attempts by a given country to reduce global supply trying to cause an increase in prices will at best create opportunities for other countries to increase market share. In non-traditional products with so-called niche markets, the existence of high "niche"prices in destination markets have induced other countries in the region and outside the region to enter those markets and to erode "niche market" or seasonal window prices for the non-traditional exports from LAC countries.

This market reality means that while particular countries can experience "comparative" advantage in some commodities for significant periods of time, the strategy for sustainable rural prosperity should avoid a dependence on the existence, let alone the persistence of these markets. Rather, the strategy should be based on a mutually re-enforcing emphasis on economy-wide competitiveness and the competitiveness of enterprises within competitive industrial clusters (Michael Porter, 1990). The Rural Prosperity Strategy and the "Rules of Trade and Market Access " elements within it, in particular should avoid "picking winners", whether sectors or firms (This was the essence of the failed import substitution and industrialization era). The strategy should continue to support public/private dialogue to promote and sustain economy-wide flexibility in financial markets–macroeconomic stability, fiscal prudence with a trade regime characterized by low, uniform and simple tariffs with a minimum of trade distorting non-tariff barriers. This is the core of economy-wide competitiveness.

The strategy should emphasize support for entrepreneurship and the development of market oriented competitive clusters in recognition that *countries don't compete in markets, enterprises do*. Such an approach emphasizes the role of entrepreneurship in seeking new and higher value markets, in meeting the ever more demanding requirements of such markets with high quality factors of production (skilled workers along with modern inputs and technologies) and through cooperation among competitive firms to ensure the provision of support services and an enabling policy environment. A cluster incorporates the forward and backward linkages of firms. The forward linkages include the marketing, logistics, and distribution system for the products that contain value derived from the efforts of poor rural households whether as workers or as entrepreneurs. The backward linkages involve input supplies, modern technologies, and in some cases, the output from farms and other agricultural enterprises in which poor rural people add value through their skills and effort.

Economic Governance, Rules of Trade and Market Access: Benefits to the Rural Poor

The role of economic governance regarding "Rules of Trade and Market Access " as they affect the benefits to be derived by the rural poor through increased access and participation in the global marketplace is to maintain a neutral framework of economic incentives and macroeconomic stability. This involves credible tariff and taxation policies (e.g. tariffs and VAT that do not discriminate across sectors or between imports and exports), transparent administrative procedures for needed regulatory functions (labor laws, SPS, IPP, etc.) and fiscal expenditures that do not spillover onto financial and foreign exchange markets to create unstable and unpredictable economic incentives. The poor suffer more from distorted policies and from unstable economic signals. The distortions usually imply that one set of factor owners is being

favored and others are being punished by the policies. The poor seldom if ever have the political clout to appropriate the benefits from policy distortions or the means to avoid the deleterious consequences arising from distortions. There is no free lunch! All subsidies must be financed and high taxes will be avoided through extra-legal means. The result will be fiscal deficits that sooner or later will be monetized and result in inflation. The poor with few assets are seldom able to avoid an inflationary tax, but the rich can through capital flight or the asset accumulation.

Beyond the economy wide deleterious consequences to the poor from bad economic governance, the benefits of specific sectoral distortions will get captured by those in positions of privilege and will serve as a source of public patronage. If the rural poor could benefit from such distortions poverty in rural Mexico would have disappeared long ago since such interventions were the hallmark of the ruling party for close to 70 years.

In addition to benefitting from truly neutral policy frameworks, the rural poor can benefit from the provision of truly public goods that are not appropriable by the rich. Public information on market and weather conditions that is reliable, timely and credible can be of great value to the rural poor. The USAID LAC Strategy for Rural Prosperity can support governments to identify such opportunities and to develop the means to supply such public services, sustainably.

Strategic Priorities for Investment to Promote Rural Prosperity

The strategic elements that emerge from this perspective in the context of "Rules of Trade and Market Access " is that the rural poor can be reached by enhancing the competitiveness of the clusters that embody their efforts (value-added) either in the forms of products or labor services. Efforts assisting new and existing enterprises which contain or have the potential to embody value created by the efforts of poor rural persons (as entrepreneurs or workers) should have high relative payoffs. This means assisting their clusters to identify new markets, to maintain current knowledge on market requirements regarding product quality standards, SPS requirements, etc. and assisting them to identify and access the means for meeting these market demand requirements (a demand driven strategy). The strategy would include working with business groups and associations within their supporting industries and institutions to participate in policy dialogue for creating and maintaining a neutral policy environment and an adequate provision of truly public goods. In these two aspects, the strategy implies that helping the rural poor to exit from poverty may involve working with the not so poor and even the rich to strengthen the clusters within which the poor have opportunities to augment the value of their human and other assets. Importantly, the approach requires a strong emphasis on enhancing the quality of human capital in ways that enhance the competitiveness of enterprises. This means problem oriented training and experience in addition to general schooling.

The following table presents an overview of how to incorporate the overall strategic approach for rules of trade and market access and some links to other actions areas to be undertaken by USAID in its LAC Rural Prosperity Initiatives. The specific recommendations apply throughout the hemisphere and sub-regional factors would affect the choice of cluster selected as the impact points but not the overall approach. For example, tourism would be emphasized in the Caribbean

and high value agriculture in Central America and the Andes. Light manufacturing opportunities would be sought throughout.

Opportunities for Enhanced Rural Prosperity: Rules of Trade and Market Access			
Rules, Policies and Institutional Arrangements	***Prevailing Conditions in LAC Countries***	***Effects on Rural Poor***	***Opportunity for USAID/LAC and Partners***
Domestic Import Tariffs on Inputs or Equipment	Most countries have reduced tariffs, but still use NTBs to limit imports modern inputs	Remaining impediments reduce land and rural labor productivity	Promote policy dialogue toward low uniform and simple tariff regimes
Reference Price Mechanisms for Intra-regional Trade in Food Commodities	In use in most LAC countries members of Andean Pact, CACM or CARICOM for Intra-regional trade in foods	Arbitrariness of application causes food insecurity and unpredictable markets: limits diversification	Assistance to Individual Countries to measure welfare effects as FTAA preparation
Domestic Food Safety and Phyto-sanitary Standards	Certification, labeling, and testing procedures are slow and erratic	Lower food security and lower labor productivity (wages)	Promote science-based harmonization & reciprocity
Rich Country Food Safety and Phyto-sanitary Requirements	EU, Japan and USA Standards have been used to protect rich country producers	Limits employment opportunities for rural workers and farming diversification	Partnership with USTR, APHIS, & FDA to assist LACs to comply
International Standards Organizations	Limited participation and use of ISO, IEC, etc. in manufacturing	Limits market niches and opportunities for contract production	GDA Partnerships with large importers to use in LACs
Domestic Customs Valuation and Administration Practices	Most countries non-compliant with WTO market-based valuations	Creates implicit domestic protection and bias against agriculture	Increase assistance for Customs Modernization using Information Tech.
Compliance with WTO Commitments	Most countries are members but have yet to comply with protocols	Symptom of inward orientation of domestic policies	Support through Public/Private Dialogue
Trade-related Intellectual Property Rights	Insecurity of IPR limits use of modern technologies	Lower land and labor productivity, poor cluster linkages	GDA partnership to provide access to rural enterprises

Opportunities for Enhanced Rural Prosperity: Rules of Trade and Market Access			
Trade-related Investment Measures	Impediments to land use and protection to specific sectors	Prevents "smart partnerships" & links with Global Markets	Support through Public/Private Dialogue

Bibliography

Anderson, Kym. "Social Policy Dimensions of Economic Integration: Environmental and Labour Standards". *National Bureau of Economic Research Working Paper Series,* 1996, no. 5702.

Bordo, Michael D. and Marc Flandreau. "Core, Periphery, Exchange Rate Regimes, and Globalization". *National Bureau of Economic Research Working Paper Series,* 2001, no. 8584.

Bredahl, Maury E. "Harmonizing Phytosanitary and Sanitary Regulations through GATT Negotiations". *The World Economy,* June 1989.

Dollar, David and Aart Kraay. "Growth is Good for the Poor". *The World Bank,* March 2000.

The Economist. "An Example in the Andes". *The Economist,* August 7, 1997.

The Economist. "Join the World". *The Economist,* December 4, 1997.

The Economist. "Playing Games with Prosperity". *The Economist,* July 26, 2001.

The Economist. "Seeds Sown for Future Growth". *The Economist,* November 15, 2001.

The Economist. "Chile and Colombia: Supermodel Angst". *The Economist,* July 1, 1999.

The Economist. "The Free Society on Trial". *The Economist,* November 19, 1998.

The Economist. "Who Elected the WTO ?". *The Economist,* September 27, 2001.

Franklin, D.L. and Alberto Valdés. "Trade Policies, Relative Prices, Real Incomes, and Food Consumption in Peru". *The Bias Against Agriculture.* Edited by Romeo Bautista and Alberto Valdés. International Center for Economic Growth and ICS Press, San Francisco, 1993

Franklin, D.L. and M.W. Harrell, and J.B. Leonard. "Income Effects of Title II Commodities in Rural Panama". *American Journal of Agricultural Economics,* February 1987.

Franklin, D.L. and Vial de Valdés. "Estrategias Nutricionales de los Hogares Pobres: Los Pobres Tambien Escogen". *Cuadernos de Economia,* Agosto 1985.

Franklin, D.L. and M.W. Harrell. "Resource Allocation Decisions in Low-Income Rural Households." *Food policy*, May 1985.

Franklin, D.L. and M.W. Harrell. "Panama: Nutritional Functional Classification Study-Who and Where are the Poor." *Food Policy*, February 1985

Franklin, D.L., G. Appleby, A.G. Keeler, P.F. Mulligan, and M.W. Harrell. "A Case Study of Vegetable Production and Marketing in Western Guatemala." *Research Triangle Institute*, 1980.

Franklin, D.L. and I. Vial de Valdés. "La Demanda por Calorias en Hogares con Niños Desnutridos y el Papel del Tiempo de la Madre." *Cuadernos de Economia*, December 1979. Invited paper to Honor the Nobel Prize for Professor T.W. Schultz.

Franklin, D.L. "Equity and Seed Based Innovations in Tropical Agriculture". Centro Internacional de Agricultura Tropical (unpublished manuscript)June 1978.

Goldberg, Pinelopi Koujianou, and Nina Pavcnik. "Trade Protection and Wages: Evidence from the Colombian Trade Reforms". *National Bureau of Economic Research Working Paper Series*, November 2001, no. 8575.

Henson, Spencer, Rupert Loader, Alan Swinbank, Maury Bredahl, and Nicole Lux. "Impact of Sanitary and Phytosanitary Measures on Developing Countries". *The University of Reading Press*, 2001.

Holthausen, Duncan M. "Input Choices and Uncertain Demand". *American Economic Review*, March 1976, vol. 66, no. 1.

Hummels, David. "Have International Transportation Costs Declined?". *University of Chicago*, July 1999.

Janvry,Alain de and Elizabeth Sadoulet,. "Rural Poverty in Latin America: Determinants and Exit Paths". *Food Policy 25*, 2000.

Krueger, Anne O. "International Economic Organizations, Developing Country Reforms, and Trade". *National Bureau of Economic Research*.

Krueger, Anne O. "Trade and Employment in Developing Countries". *National Bureau of Economic Research*, 1982, vol 1 and 2.

Lopez, R and A. Valdés. "Fighting Rural Poverty in Latin America". *World Bank Working Papers*, 1998.

Porter, Michael. *Competitiveness of Nations*, 1990. The Free Press.

Sachs, Jeffrey. "Nature, Nurture and Growth". *The Economist,* June 12, 1997.

Schultz, T.W. "The Economics of Being Poor: Nobel Lecture (1979)". *Journal of Political Economy,* 1980, vol.88 no. 4.

Schultz, T. W. "The Value of the Ability to Deal with Desequilibria". *Journal of Economic Literature*, 1975, vol. 13.

Scobie, G.M. and D.L. Franklin. "The Impact of Supervised Credit Programmes on Technological Change in Developing Agriculture." *The Australian Journal of Agricultural Economics,* April 1977.

Slaughter, Matthew J. "Trade and Labor-Market Outcomes: What About Developing Countries?. "*National Bureau of Economic Research,* July 2000.

Soto, Hernando de. "The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else". *New York, Basic Books,* 2000.

Valdés, A. and D.L. Franklin. "Evaluation of Design Parameters in Cattle Production in the Colombia Llanos." *Economics and the Design of Small Farmer Technology.* Edited by Valdés, Scobie, and Dillon. Iowa State Press, 1979

World Bank. "World Development Report: Attacking Poverty". *The World Bank,* 2000.

World Bank. "Globalization, Growth, and Poverty: Building an Inclusive World Economy". *The World Bank and Oxford University Press.*

Rural Prosperity White Paper: Rules of Trade and Market Access

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I BACKGROUND AND TRENDS

Latin America and the Caribbean (LAC) has slightly increased its participation in world agricultural production over the last decades (Chart 1), mostly because growth in Brazilian production (Chart 2). Without Brazil, LAC's share has been stable at around 6.5-7% of world total agricultural production. The most dramatic change is the increase in China's participation in world production (Chart 1).

Charts 3 and 4 show the net trade position in current dollars for different regions. The Western Hemisphere as a whole is the main net exporting region, while Asia is the most important net buyer region, with some 50.000 million US dollars in net imports. The European Union has been gradually reducing its net imports practically reaching balance by the end of the 1990s. As a whole, the net aggregate result is that the American Continent, along with Australia and New Zealand, supply the net buyers in the rest of the world, mostly Asia, Africa and the Transition Economies. This fact highlights the importance of a cooperative and balanced Free Trade Area of the Americas for the world agriculture.

Historically, LAC has had a positive net agricultural trade balance. However, the ratio between the value of agricultural exports and imports has fallen significantly from about 3-3.5 in the 60's to around 1.70 in the 90's (Diaz-Bonilla and Reca, 1999). The overall positive trade balance masks wide differences in the region. Looking at the agricultural

export/import ratio in individual countries, important differences exist: from Argentina and Costa Rica, which have ratios of more than 8.5 and 5.5, respectively, to Haiti, Peru, Bahamas and Venezuela, with ratios of 0.3 or less (Diaz-Bonilla and Reca, 1999). Another important fact in world agricultural trade is the collapse in the real prices of agricultural commodities since the mid-1980s, from which they have not recovered (Chart 5). This has been the result of a combination of agricultural protectionism in industrialized countries, substantial shift in macroeconomic policies, and technological change in different agricultural producing countries (Diaz-Bonilla and Reca, 2000). A market-oriented result for the WTO negotiations agreed in Doha will help to redress the first problem, contributing to strengthened agricultural prices.

During the 90's, a general process of trade liberalization took place in the region, as a result of different causes. One of them, has been the advance of regional trade integration, which included the creation of new trade agreements (such as NAFTA and MERCOSUR), the revitalization of older ones (such as the Central America Common Market, the Andean Pact and the CARICOM) and the proliferation of smaller trade pacts (such as G-3, and the active presence of Chile in the signing of bilateral agreements). Moreover, several countries in Latin America liberalized their trade regimes in the last decade either because they joined the GATT (Mexico in 1986 and Venezuela in 1990), or because they unilaterally pursued policies of greater openness (like Chile). This has changed the policy environment.

In terms of individual products, one of the most important developments of LAC agriculture in the recent past has been the emergence of fruits and vegetables as the leading agricultural export of the region (in value terms), displacing traditional commodities. Along with the growth of the oilseeds complex, both groups account for an important part of the increase in production and the continuation of a surplus in net agricultural trade. On the other hand, traditional exports such as coffee and sugar have decreased in importance (Tables 1 and 3).

The region has been usually a net importer of cereals and dairy products, and the gap appears to have increased lately (Table 2). This seems related more to increases in consumption than declines in production, which, for the region as a whole, has accelerated in recent times compared to the 1980's (although there have been declines in production in some countries). The resumption of economic growth, lower world prices, the opening up of the economies and the surge in capital inflows leading to some appreciation in exchange rates in the region have been pushing imports up since the late eighties. But the restructuring of the agricultural sector has also generated larger exports (Chart 6 and 7). Overall, in LAC, net imports of cereals and dairy are more than compensated by net trade surpluses in the other agricultural products.

An important characteristic of agricultural trade in the region (in fact, of all international trade in the Americas) is the steady increase in the share of intraregional commerce. Abetted by regional pacts, such as the North American Free Trade Agreement (NAFTA) and Mercado Común del Sur (MERCOSUR), trade within the Americas (including the United States and Canada) rose from one-fourth of total agricultural exports in 1981–1983 to more than one-third by the mid 1990s. Regional pacts have had an impact on the trade flows of their respective members. Clear cases are Mexico with regard to NAFTA and Uruguay, Paraguay and (to a lesser extent) Argentina with respect to MERCOSUR. But, for obvious reasons, NAFTA also has a strong presence in the trade flows of non-members countries in the region, including Brazil (for whom in terms of agricultural and food exports, NAFTA is more important than MERCOSUR).

All in all, the process of trade liberalization that has taken place in the region and the implementation of trade agreements have fostered agricultural trade. This has led to larger coefficients of internationalization, measured as exports over production and imports over consumption, for a variety of agricultural products, indicating a larger exposure of LAC's agricultural sector to world markets (Charts 6 and 7).

II. PUBLIC AND PRIVATE TRADE RULES: CONTEXT

The evolution of trade flows, with its impact on growth, rural development and poverty alleviation, will depend, inter alia, on trade and agricultural policies in the Americas and elsewhere, which, in turn will be influenced by different multilateral, regional and bilateral agreements that will result from the complex negotiations ahead. These negotiations include the continuation of the process initiated during the Uruguay Round of GATT and recently reaffirmed in Doha, Qatar, and, for the countries of the region, the possibility of creating a Free Trade Area of the Americas, as well as extraregional negotiations such as the participation of NAFTA countries and Chile within APEC, and the discussions between MERCOSUR and the European Union (see Diaz-Bonilla and Robinson, 1999).

In addition to changes in public sector rules, trade patterns and the possibility of rural development and poverty alleviation in LAC, will also be influenced by changes in private markets. Some of the most important developments in this regard are:

*The increase in urbanization and income growth in developing countries, with an increased presence of middle-class consumers. According to projections by IFPRI (2001) 85% of the world increase in demand for cereals and meats by 2020 will be in developing countries. USDA (2001) estimates that from 900 million people in about 20 large developing countries in mid 1990s the number of potential middle class consumers in those countries will jump to about 1.5 billion by mid 2000s. These markets will be important in quantitative terms, but they will also present special challenges for small farmers and the rural poor due to increasing demands for quality and safety. The policy issues deriving from these trends are the importance of being competitive not only externally but also in its own markets in developing countries for agricultural and rural growth, and how to make sure that small farmers and the rural poor benefit from these opportunities.

*Stronger food safety concerns in developed countries, linked to real problems (BSE) and largely fabricated ones (GMOs), with a slow growth of demand, but permanently evolving niches. One aspect will be the extended use of methods such as Hazard

Analysis and Critical Control Points. In addition to food safety and quality, there will be a continuous sustained demand for variety and other attributes (environment friendly, animal welfare). This may lead to more demands for publicly mandated or privately supplied labeling

*Reorganization of food chains, including supermarkets and agroprocessors, with the power shifting to those agents in the food chain closer to the consumer[1]. Global markets for high-value agricultural produce (HVAP) have become increasingly concentrated in recent years[2], with greater vertical integration between producers and consumers, as a result of shifts in demographics and consumer demand, improved communication, and increased international capital flow. The coordination of procurement, processing, and distribution of products within the same multinational firms has increased. This has changed the environment within which exporters from developing countries operate. Both traditional multinational processing firms and the increasingly active multinational supermarket chains procure produce directly from developing countries. Similar trends of concentration and vertical integration can be observed among larger companies in developing countries. Export transactions involving HVAPs from developing countries increasingly take place under forward contracts and are subject to stringent specifications regarding food safety, quality, quantity, and timeliness of delivery. Concentration among exporters appears linked to the need of the retailers for larger volumes and steady supply, and to the high cost of monitoring, testing, and keeping food safety records to satisfy retailers. Effective participation by developing-country producers in these growing global markets requires access to specialized information, technology, professional knowledge, assets, institutions, infrastructure, and liquidity. There is some evidence of export production shifting to larger farmers.

Furthermore, the same pressures that operate in international markets also affect the growing high-value end of domestic markets. Predictability of safety, quality, and ontime

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[1] What follows comes directly from Delgado, Minot, and Wada, 2001, and Minot and Delgado, 2001

[2] Examples of greater concentration in the food retail sector include the fact that, for instance, 4 chains account for 75% of UK food sales and the 4 largest US retailers increased their share fro 17% in 1995 à 25% 1998 (Minot and Delgado, 2001)

deliveries of known quantities is critical. Small-scale and traditional producers have trouble participating under these conditions. For such producers to remain engaged in growing HVAP markets, they must be able to contract forward with the main outlets for their produce, and must be organized in ways that reduce the risks that either party will be unable to complete the terms of their contract.

These changes lead to the development of private sector standards, and an emphasis in quality control and assurance schemes, with requirements for traceability. Monitoring and enforcement of production methods to ensure food quality/safety leads to setting quality and safety standards stricter than legal standards.

In what follows the rules of trade and market access are discussed separating those issues more directly related to intergovernmental negotiations, on one hand, and those arising from changes in private markets and practices, and which may require public policies and investments, on the other.

III. WTO AND OTHER TRADE NEGOTIATIONS [3]

EXPORT SUBSIDIES, DUMPING, AND RELATED CONCERNS

For LAC countries a key issue is the elimination of export subsidies in world agricultural trade. These subsidies act as taxes on agricultural producers in nonsubsidizing countries, which are the norm in LAC. Countries in the region also will be interested in increasing the transparency of disciplines on the practices of state trading enterprises. These practices may work as subsidies or dumping on the export side, or hidden trade barriers on the import side.

Several LAC countries also want to avoid loopholes and "gray areas" in the disciplines on export subsidies, export credits, and food aid. Accordingly they have urged the integration of these issues into a unified framework.

MARKET ACCESS

To expand market access LAC countries it is important to consider: increases in the level of imports allowed under the current regime of tariff-rate quotas (TRQs); more transparent and equitable implementation of those TRQs; additional reductions in tariffs (particularly those that are still high for key products, such as fruits and vegetables, sugar, meat, and dairy products); elimination of tariff escalation (a practice that undermines the ability of LAC countries to generate local employment and increase the value added of their exported products); and completion of the process of tariffication in the cases where exemptions were granted.

DOMESTIC SUPPORT

The final agreement on subsidies reached at the UR did not impose the disciplines initially envisaged because the measure of support was transformed from a product-based one to an aggregate value for the whole agricultural sector. Furthermore, the main subsidies of the U.S. and the EU were kept outside the UR disciplines in what is called the "blue box" (something in between the green box of allowed interventions and the amber box of those clearly prohibited).

LAC countries have dismantled or significantly reduced their own domestic support for agricultural producers for reasons mainly related to fiscal constraints. They have an interest, therefore, to push for further reform along these lines, particularly tightening the criteria for the green box, defining the measure of support by product, and eliminating the exemptions considered under the blue box. Although only the EU now has domestic subsidies in the blue box, the U.S. has utilized different ad-hoc subsidizing schemes to shield its producers. The effect is to shift the costs of adjustment to other countries. As a main exporting region of agricultural products LAC is suffering from the continuation of subsidies in industrialized countries.

SANITARY AND PHYTOSANITARY (SPS) ISSUES [4]

A fourth set of issues relates to sanitary and phytosanitary measures (SPS), as well as other technical, quality, and environmental standards. These measures can be, and have

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[3] This section follows mainly Diaz-Bonilla and Robinson, 1999, and Diaz-Bonilla and Reca, 1999.
[4] Based on Diaz-Bonilla, Robinson, Thomas, and Yanoma, 2001.

been, used as barriers to trade. Concerns about the possibility that the liberalization of agricultural trade achieved under the AoA could be negated by manipulation of those regulations led to the negotiation during the Uruguay Round of two separate documents. The first was the Agreement on SPS measures, directly related to human, plant and animal health issues linked to trade in agricultural products. The second was the Agreement on Technical Barriers to Trade (TBT), which covered technical regulations and standards, and conformity assessment procedures.

Developing countries have complained over the years about SPS measures and inspections that tend to become stricter when there are agricultural surpluses in the domestic markets of industrialized countries. They have also criticized the long periods required by industrialized countries to complete the pest and disease studies needed to allow the import of new agricultural products from developing countries. Since the Uruguay Round Agreement, and in the preliminary discussions related to the continuation of the negotiations mandated in Article 20 of the AoA, some developing countries have argued for greater flexibility in the implementation of their obligations under the SPS Agreement. Finger and Schuler (2000) have calculated the relatively important budgetary costs that some of the operational requirements of different WTO commitments (and not only the SPS Agreement) may impose on low income developing countries. They argued for taking a second look at those WTO regulatory issues in order to align them with the real developmental needs of developing countries, as separate from just complying with WTO legal texts.

On the other hand, a strong SPS framework may be important for developing countries, not only because a competitive export position requires establishing and maintaining the sanitary and quality requirements for their products, but also as a way of improving health conditions in the developing countries, to the extent that best practices and standards would then be more widely applied in those countries. Probably the most adequate approach for developing countries is to insist on receiving the technical and financial assistance considered in the SPS Agreement (Articles 29 and 30) to build and improve their own systems of quality control and health and safety standards. These systems should be centered on their own needs to improve health and sanitary domestic conditions, and the regulatory burdens of compliance should, at the very least, not

represent shares of the GDP larger than what industrialized countries devote to similar functions.

FOOD SECURITY[5]

The impact of trade and agricultural policy changes on poor consumers on the demand side and small and near-landless producers on the supply side is a matter of debate in LAC. Some have argued that trade liberalization may hurt both groups. Others have answered that greater productivity and growth coming from better trade and sectoral policies should help generate employment and income, given adequate overall economic policies and properly functioning markets and social institutions.

During the current WTO agricultural negotiations (which began in March 2000), several developing countries indicated concerns that further trade liberalization could create problems for their large agricultural populations, where poverty is concentrated. Poor countries have argued for a slower pace in reducing tariffs (or maintaining their current levels) on the understandable premise that industrialized countries should first eliminate their higher levels of protection and subsidization. The aim is also to avoid any sudden negative impact on poor producers, whose vulnerable livelihoods may be irreparably damaged by drastic shocks (for instance, by forcing poor families to sell productive assets or to take children from school).

This policy debate reflects a permanent tension between maintaining high prices for producers versus assuring low prices for consumers. While industrialized countries have used transfers from consumers and taxpayers to maintain high prices for producers, developing countries have enforced low agricultural prices to further the process of industrialization. Several studies have shown that poverty alleviation in developing countries was impaired by policies that protected capital-intensive industrialization and discriminated against agriculture. Post-1980s policy reforms in developing countries appear to have reduced or eliminated general policy biases against agriculture, but in some cases, they may have contributed to the decline of the infrastructure and institutions needed for agricultural production and commercialization. Further correction of market

[5] What follows is mainly from Diaz-Bonilla, Thomas, and Robinson, 2001

distortions may still be needed in some countries, but now the emphasis should be on policies for investing in the rural economy, focusing on the poor.

Out of concern for small farmers, some have argued that developing countries should move even further towards protection of the agricultural sector. However, considering that poor households may spend as much as 50 percent of their income on food, these recommendations could have a negative impact on the poverty and food security of not only the increasing number of poor urban households and landless rural workers, but also poor small farmers, who tend to be net buyers of food. Trade protection for food products is equivalent to a very regressive implicit tax on food consumption, mostly captured by large agricultural producers, with a greater impact on poor consumers. Also, trade protection for any sector usually implies negative employment and production effects in other sectors, and the general effect of widespread trade protection is a reduction in exports.

Rather than increasing protection, the best approach for developing countries is to eliminate biases against the agricultural sector in the general policy framework, and to increase investments in human capital, property rights, management of land and water, technology, infrastructure, nonagricultural rural enterprises, organizations of small farmers, and other forms of expansion of social capital and political participation for the poor and vulnerable. At the same time, developing countries may legitimately insist that industrialized countries reduce their higher levels of subsidization and protection, and ask for policy instruments that allow the development of their rural sector and to protect the livelihoods of the rural poor from import shocks that could cause irreparable damage.

Small producers will also be helped by the disciplines brought by the UR Agreement on Agriculture to subsidized and dumped exports. At the same time the agreement allows the implementation of a large variety of programs aimed at poor producers or consumers, including stocks for food security purposes and domestic food aid for populations in need. The language of the AoA can be partially modified to reflect those concerns (see the discussion in Diaz-Bonilla, Thomas, and Robinson, 2001). Adequate design and funding of domestic policies to achieve agricultural growth and poverty alleviation are essential and most certainly will not be helped by trade-distorting interventions.

HETEROGENEITY

In all these negotiations the heterogeneity of LAC and the agricultural sector of the region must be kept in mind. LAC is a vast region, with exporters of agricultural products from temperate climates, exporters of subtropical and tropical goods, and net food importers. Some worry about domestic and export subsidies in cereals, oilseeds, and meat; others are concerned about quotas, tariffs, and the application of SPS measures in fruits and vegetables; yet others may be troubled by high barriers in tropical products such as sugar and tariff escalation in many other products. Countries like Barbados, Dominican Republic, Haiti, Mexico, Peru, Surinam, Trinidad and Tobago, and Venezuela, which are net agricultural importers, will worry about export taxes, export prohibitions, and other measures that may hamper their access to food supply at adequate prices and increase volatility in world markets.

A recent cluster analysis of food security situations including 167 countries have found that some LAC countries appear in food insecure groups (Diaz-Bonilla, Thomas, Robinson, and Cattaneo, 2000). Those countries may need special consideration in the negotiations.

IV. CHANGES IN PRIVATE MARKETS AND PUBLIC POLICIES AND INVESTMENTS FOR SMALL FARMER PARTICIPATION AND RURAL POVERTY ALLEVIATION [6]

As mentioned already, wholesale and retail marketing of agricultural and food products, particularly high-value agricultural products (HVAPs), has changed rapidly. This dynamic situation poses special obstacles for small-scale farmers, who constitute the majority of the population in many poor developing countries. They will have difficulty improving their livelihoods if they are not involved in this rapidly evolving sector. The key challenge is to find non-distorting, equitable policy and technology options that support the participation of small-scale producers in diversified and dynamic agricultural and food markets. At the same time, the creation or preservation of artificial advantages for large enterprises that drive small-scale producers out of those markets must be avoided. Trade barriers such as agricultural tariffs, implemented in the name of protecting

[6] This section is taken directly from Delgado, Minot, and Wada, 2001, and Minot and Delgado, 2001

smallholder agriculture, often, in fact, serve the interests of large domestic operations that compete with small farmers.

Those changes in private markets operations and institutions require public policies and the investments to facilitate broad-based rural development that includes small farmers, alleviates poverty, and ensures food security.

Two key strategies for keeping smallholder farmers involved in demanding markets for HVAPs are producer marketing cooperatives and contract farming schemes. The histories of both are mixed and have been extensively documented. The central issues are (1) whether wholesale and retail outlets have options for securing products other than by dealing with smallholder farmers (such options would include investments in plantations), (2) whether governments are playing a role in providing a facilitating environment for smallholder production, and favoring the establishment of forward linkages between them and other agents in the food value chain, and (3) to what degree smallholder farmers are participating in the management of smallholder schemes.

There are different examples with a range of outcomes. Horticulture in the central highlands of Kenya provides a good example of a capital- and skill-intensive activity that has steadily shifted to smaller-scale contract farms. Strong political backing by the government, a favorable regulatory environment, good infrastructure, services such as extension to growers, market information, and quality inspection services, and cold storage at the airport, have been central to its success. In Guatemala and Honduras, where population densities in the vegetable-growing areas are higher and the political pressure of small farmers is important, foreign distributors have tended to contract with large numbers of small farmers. In Mexico, on the other hand, contracting by US-owned processors and distributors has tended to involve large Mexican farms and industrial operations.

Small-scale participation in the livestock and fisheries sectors tends to be more difficult for structural reasons, linked to the fact that the investments necessary for pollution abatement and disease control are often beyond the means of small-scale farmers

operating independently. Without proactive development and policies to keep smallholders involved, the industry in developing countries separates into commercial and marginal productions. There are, however, examples of successful contract farming for livestock products such as the Soro-Soro Ibaba cooperative in Southern Luzon, Philippines. The Soro-Soro scheme associates a large number of nonagricultural investors with regionally defined groups of small-scale farmers. The cooperative provides overall services for management and supervision, and functions as an investment company, paying dividends to shareholders.

Successful models for keeping small-scale operators involved in production of diversified and dynamic agricultural products requires (1) market reform policies that encourage smallholder investment, avoid differential subsidies to large-scale operations, and reduce transaction costs; (2) institutional development to help small-scale operators meet global standards regarding quality, food safety, and timeliness; and (3) provision of public goods such as research, extension, and infrastructure. Such an approach needs both political commitment from government and ways to share the risks and rewards of vertical coordination fairly, so that small-scale producers can participate in growing high-return sectors.

In summary, some of the areas to be considered in this regard include (Minot and Delgado, 2001)

*Legal infrastructure to allow/promote institutions that ensure food quality/safety, but including small farmers producers and/or facilitating increased employment in rural areas. Some of the topics include: support for cooperatives (e.g. dairy), contract farming (e.g. processed goods), trade associations (to define standards), and private inspection/grading services.

*Research and extension on products with potential for diversification based on small farmers and generation of employment in rural areas. This should include not only

production, but also the whole post-harvest chain (including transportation, storage, conservation and packaging), and export market research.

*Strengthening of key public services such as public inspection and certification, and plant and animal disease control.

*Investment in infrastructure such as roads, communications, and basic health (e.g potable water).

*Eliminate preferential treatment of large farms, and provide incentives for supermarkets and agroprocessors to contract with small holders. Research on legal, institutional, and regulatory approaches to facilitating links between small farmers and exporters (vertical coordination). Continuous innovation to reduce transaction costs.

*Study and document impact of SPS regulations (domestic and in international markets) on the poor and small farmers. Cost/benefit analysis of alternative regulatory approaches.

USAID can support different technical assistance and investment projects in those areas.

V. MACROECONOMIC ISSUES, CAPITAL MARKETS, AND ECONOMIC INSTABILITY

The importance of macroeconomic policies for the agricultural sector is widely recognized. Economists have placed particular emphasis on the impact of exchange rate policy on agriculture, but, in fact, the whole macroeconomic program is relevant, including monetary and fiscal policies. Moreover, in a world with increasingly large financial markets, the dynamics of trade flows appear to be dominated by capital flows, contrary to historical tendencies. Chart 8 shows capital flows as percentage of the GDP for LAC.

Adequately balanced macroeconomic policies at the world level, and a strengthened international financial architecture may be more important for commercial flows, including flow of agricultural products, than trade negotiations. Developments in capital

markets may also affect price stability, including that of agricultural products. The challenge may well be to devise market-based schemes for income stabilization, using the far larger pool of financial resources and instruments in capital markets.

USAID can contribute to finance studies and negotiations, as part of the Summit of the Americas process, aimed at improving the macroeconomic framework and international financial architecture in the Western Hemisphere.

REFERENCES

Delgado, Minot, and Wada (2001) High Value Agriculture in Diaz-Bonilla and Robinson (eds) (2001) Shaping Globalization for POverty Alleviation and Food Security. 2020 Focus 8. August 2001. IFPRI

Diaz-Bonilla and Reca (1999) Latin America Perspective in Diaz-Bonilla and Robinson (1999) Getting Ready for the Millennium Round Trade Negotiations. 2020 Focus 1. April 1999. IFPRI

Diaz-Bonilla, E. and L. Reca. 2000 Trade and agro-industrialization in developing countries. *Agricultural Economics* 23 (3).

Diaz-Bonilla and Robinson (1999) Getting Ready for the Millennium Round Trade Negotiations. 2020 Focus 1. April 1999. IFPRI

Diaz-Bonilla and Robinson (2001) Shaping Globalization for Poverty Alleviation and Food Security. 2020 Focus 8. August 2001. IFPRI

Diaz-Bonilla, Robinson, Thomas, and Yanoma (2001) ISSUES PAPER. WTO, AGRICULTURE, AND DEVELOPING COUNTRIES. Trade and Macroeconomics Division. International Food Policy Research Institute. Washington, D.C. March 22, 2001. Paper prepared for the meeting of the Advisory Group of the research project: WTO negotiations and Changes in National Agricultural and Trade Policies: Consequences for Developing Countries. March 26 to March 30, Denmark.

Diaz-Bonilla, Thomas, and Robinson (2001) ISSUES PAPER. TRADE LIBERALIZATION, WTO, AND FOOD SECURITY. Trade and Macroeconomics Division. International Food Policy Research Institute. Washington, D.C. October 22, 2001. Paper prepared for the meeting of the Advisory Group of the research project: WTO negotiations and Changes in National Agricultural and Trade Policies: Consequences for Developing Countries. October 25, Denmark.

Diaz-Bonilla, Thomas, Robinson, and Cattaneo, (2000) *Food security and trade negotiations in the World Trade Organization: A cluster analysis of country groups.*

Trade and Macroeconomics discussion paper 59. Washington, D.C.: International Food Policy Research Institute.

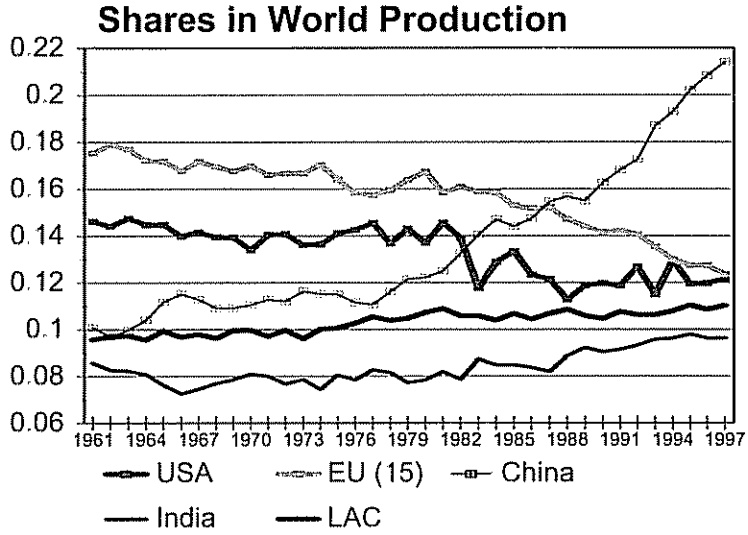
IFPRI (2001) Global Food Projections to 2020. Prepared by Mark Rosegrant, Michael Paisner, Siet Meijer, and Julie Witcover. Washnigton DC. 2001.

Finger and Schuler (2000). Finger, M. J., and P. Schuler. 2000. Implementation of Uruguay Round Commitments: The development challenge. World Bank.

Minot and Delgado (2001) Food safety and implications for farmers in developing countries. PPT presentation. IPR Meetings. December 2001. IFPRI.

USDA (2001) Food and Agricultural Policy. Taking Stock for the New Century. September 2001. Washington DC

Chart 1.



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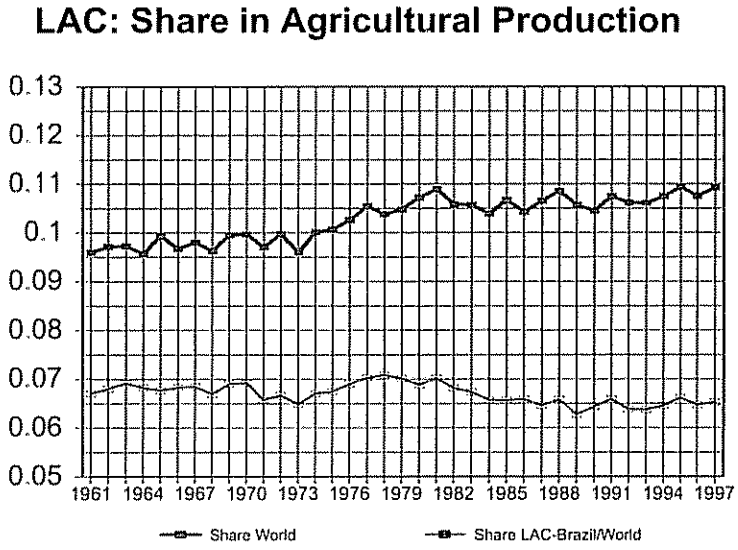

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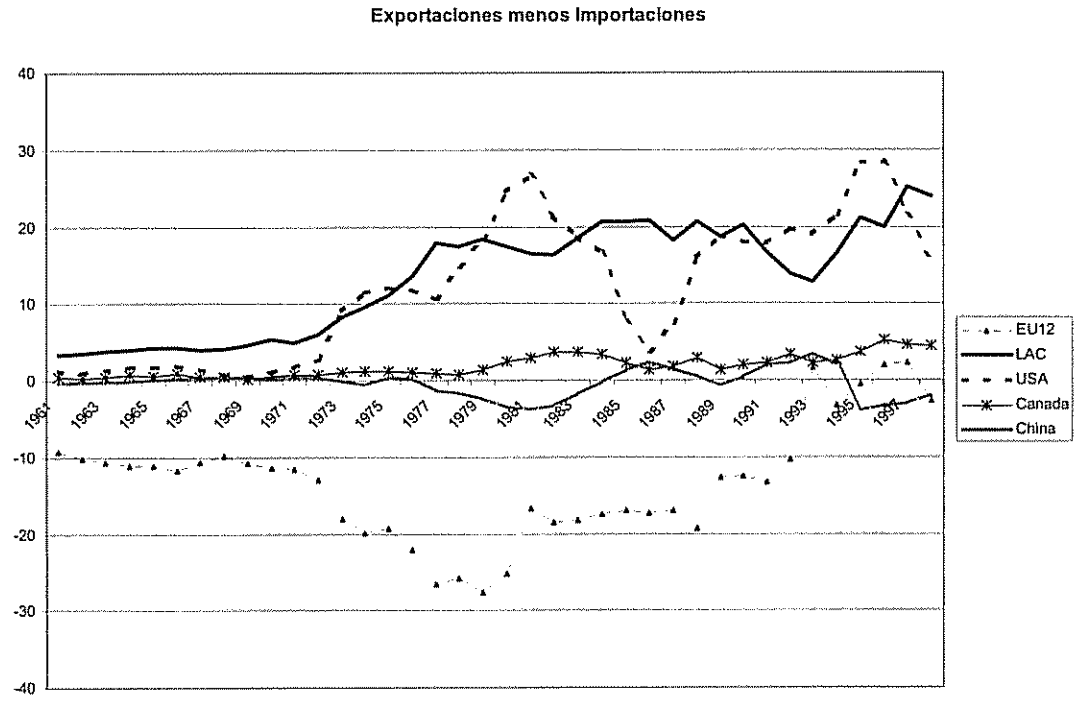

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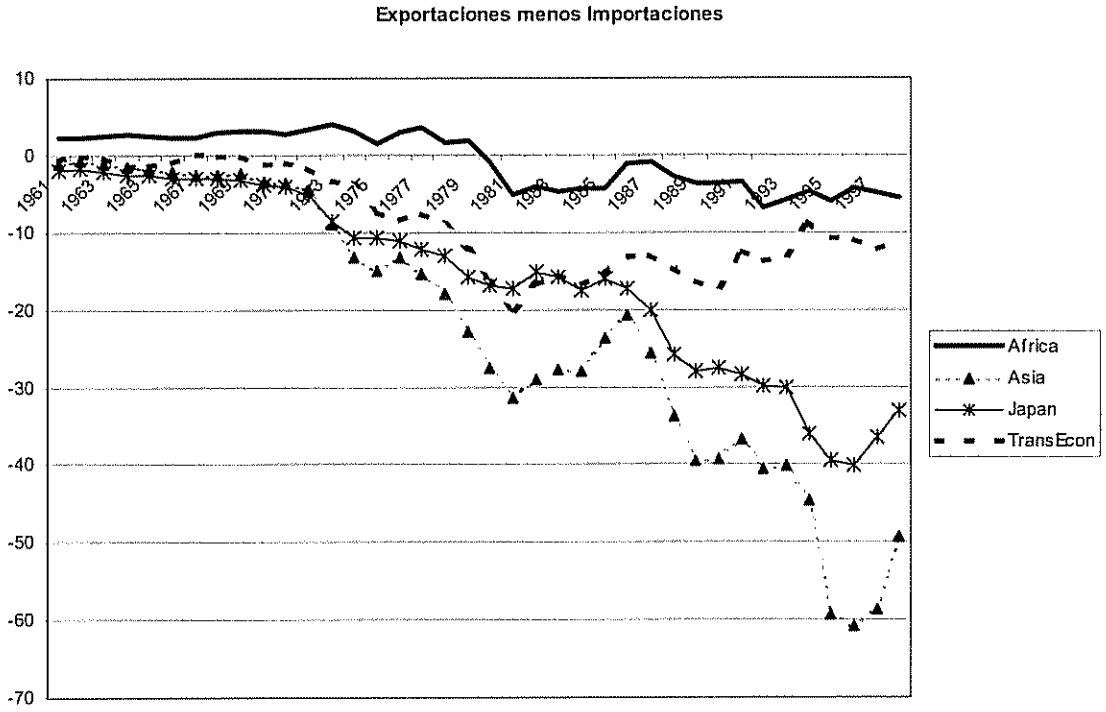

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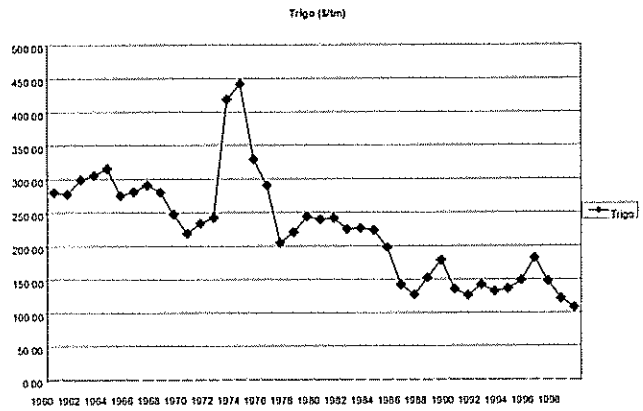
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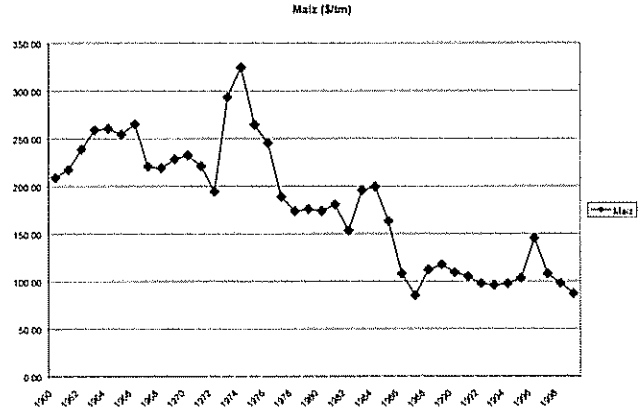
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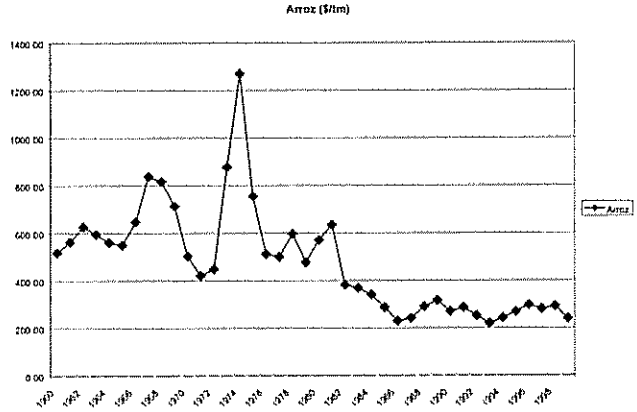
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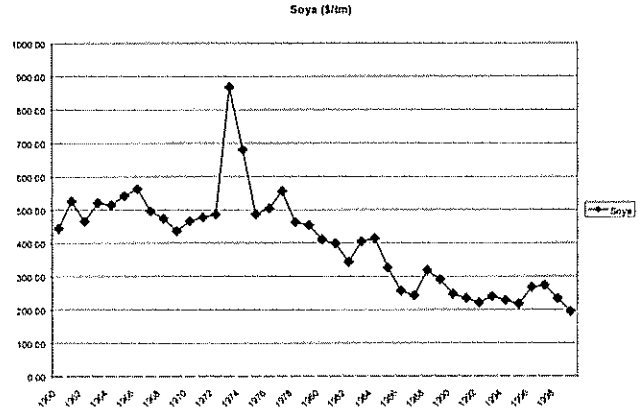
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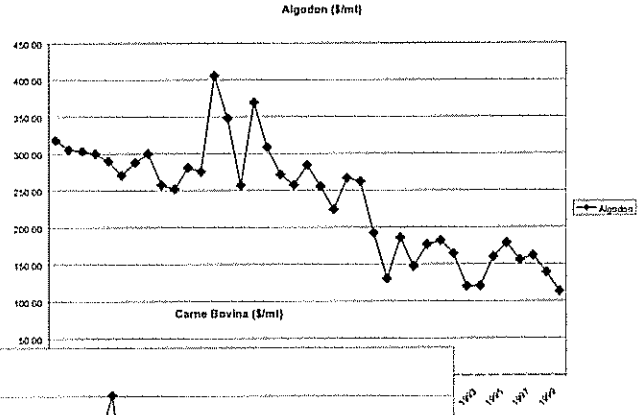
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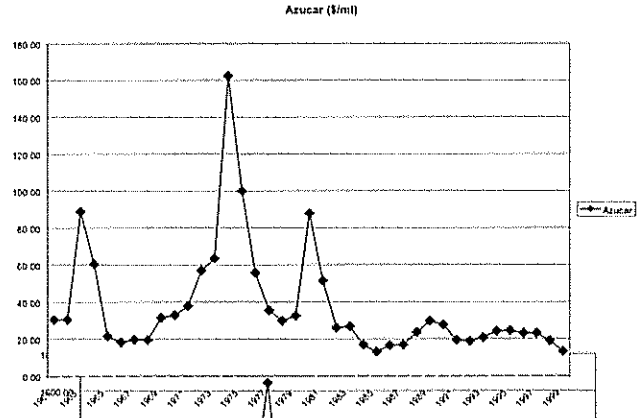
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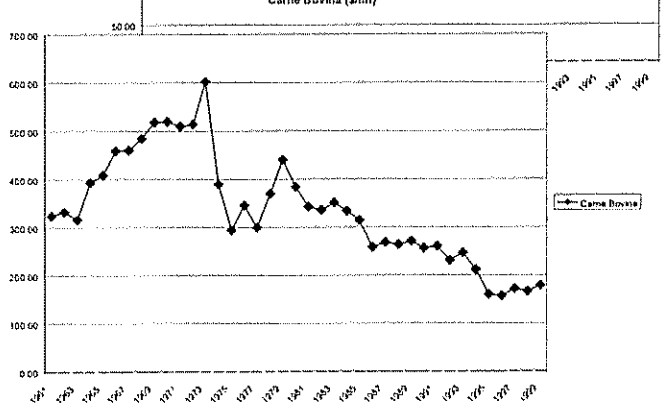
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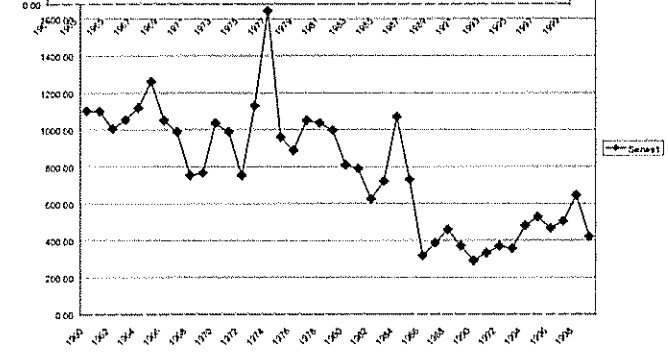
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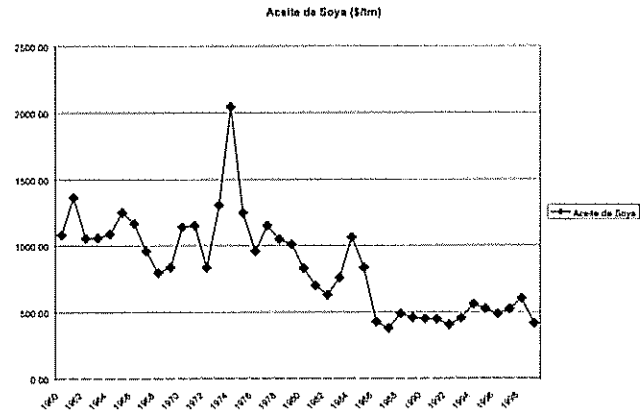
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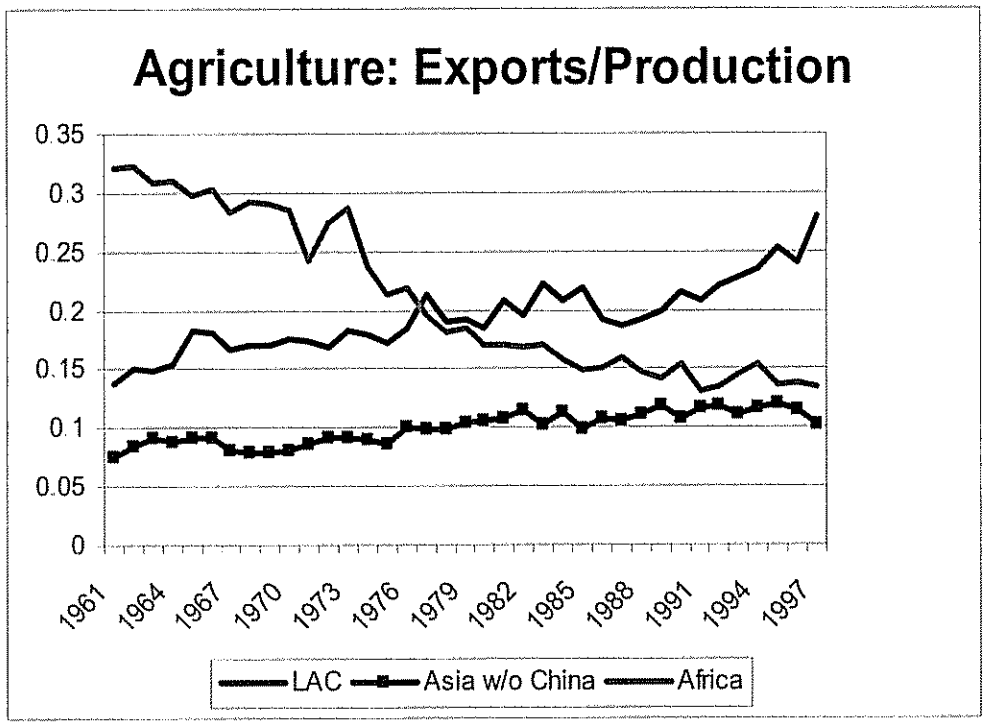
Chart 6



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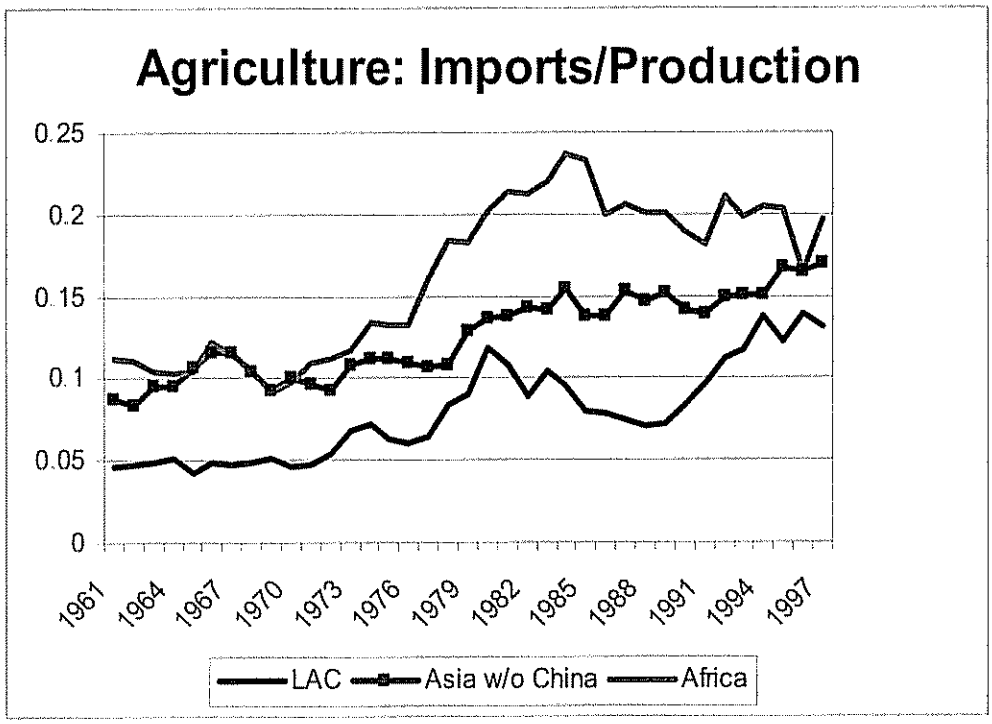

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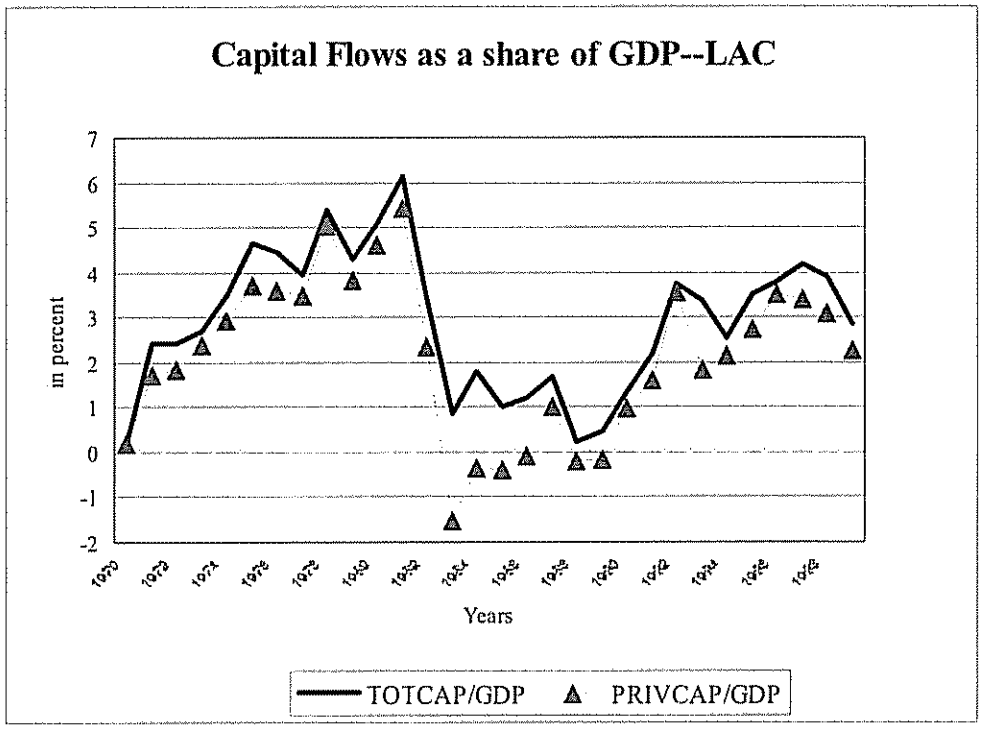
Capital Flows as a share of GDP--LAC
in percent
7
6
5
4
3
2
1
0
-1
-2
Years
TOTCAP/GDP
PRIVCAP/GDP

Table 1. Structure of agricultural exports—Latin America and the Caribbean

	1961-65	1966-70	1971-75	1976-80	1981-85	1986-90	1991-95	1996-99
Cereals and Prep	8.62	9.33	8.52	6.87	9.16	4.54	6.36	8.16
Coffee+Tea+Cocoa+Sp	29.69	28.78	22.20	31.60	24.30	23.48	17.01	16.55
Fruit + Vegetables	8.18	10.61	8.93	9.35	12.56	18.33	23.28	22.10
Meat and Meat Prep	7.49	9.40	8.41	6.04	6.22	5.90	7.40	6.23
Natural Rubber	0.16	0.13	0.07	0.03	0.02	0.06	0.08	0.08
Oilseed & Products	4.48	4.55	9.23	12.83	15.77	17.71	20.19	20.81
Sugar and Honey	19.14	17.89	28.92	21.32	21.31	18.13	9.60	8.96
Textile Fibres	14.63	11.34	7.06	5.35	3.89	3.27	2.42	1.48
Tobacco	1.60	1.55	2.00	1.92	2.54	2.63	4.08	4.35
Other	6.01	6.42	4.67	4.68	4.24	5.97	9.60	11.28
Total Agricultural Products	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 2—Structure of agricultural imports—Latin America and the Caribbean

	1961-65	1966-70	1971-75	1976-80	1981-85	1986-90	1991-95	1996-99
Cereals and Prep	34.21	32.23	39.22	36.44	37.09	27.54	27.00	27.33
Coffee+Tea+Cocoa+Sp	4.88	4.95	3.87	4.27	2.54	2.75	2.95	3.04
Dairy Products+Eggs	8.80	8.49	7.98	7.20	7.51	10.35	8.63	7.18
Fruit + Vegetables	9.82	11.44	10.21	10.18	8.80	8.88	10.16	10.50
Meat and Meat Prep	5.53	6.16	5.68	5.59	5.52	8.93	8.32	7.27
Natural Rubber	2.98	2.21	2.02	2.24	1.82	2.31	1.55	1.14
Oilseeds&products	6.12	6.52	8.46	10.83	14.79	13.81	13.26	14.87
Sugar and Honey	2.46	1.73	2.31	4.34	4.69	3.47	3.70	3.39
Textile Fibres	5.71	4.75	2.98	1.97	2.03	3.65	4.71	5.20
Tobacco	2.46	2.16	1.17	1.19	0.94	0.86	1.40	2.29
Other	17.02	19.36	16.10	15.76	14.26	17.47	18.32	17.80
Total Agricultural Products	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 3. Net trade in selected products for developing countries

(Billion US dollars; 1997)

	Asia (w/o China)	Africa	LAC
CEREALS	-8.9	-6.8	-2.8
MEAT	-1.8	-0.3	+1.3
DAIRY	-3.5	-1.4	-1.5
OILCROPS	-0.2	-1.4	+6.9
FRUITS/VEGETABLES	+0.7	+0.6	+7.8
COFFEE/COCOA/TEA	+2.8	+3.9	+9.2
SUGAR	-2.0	-0.8	+3.5
TOBACCO	-0.6	+0.5	+1.9
TEXTILE FIBERS	-3.0	+1.1	-0.9
AGRICULTURAL PRODUCTS a/ (TOTAL)	-20.1	-5.2	+25.4

a/ Total values for agricultural products include other products not shown in the list above.
Source: FAOSTAT

SCIENCE AND TECHNOLOGY: ESSENTIAL KNOWLEDGE SYSTEMS TO ENHANCE COMPETITIVENESS AND SUSTAINABILITY

By

David D. Bathrick

A SPECIAL PAPER FOR USAID/LAC'S RURAL PROSPERITY WHITE PAPER

RAISE IQC
DECEMBER 6, 2001

CHEMONICS INTERNATIONAL

SCIENCE AND TECHNOLOGY: ESSENTIAL KNOWLEDGE SYSTEMS TO ENHANCE COMPETITIVENESS WHILE PROMOTING SUSTAINABILITY

Introduction

Throughout Latin America and the Caribbean (LAC), globalization and related trade expansion forces converge to form previously unimaginable farm and rural sector links driven by regional and global markets. In this setting, if innovative, demand-driven knowledge systems are introduced, previously under-exploited resources have the potential to stimulate broad-based economic growth that reduces poverty. Generally speaking however, this unprecedented potential is not joined with the appropriate, Science and Technology (S&T) program. To confront this fundamental need, this paper discusses: 1) topic rationale, 2) changing dynamics and responses, 3) corresponding policy and institutional recommendations, and 4) suggested activities that USAID may use to stimulate urgently needed country and donor-level responses.

This report serves as input to USAID/LAC's "Rural Prosperity White Paper" which will help guide discussion at an upcoming USAID/LAC conference and subsequent strategy exercise where as appropriate, greater specificity will be developed. To address the challenge in the seven days provided, I reviewed LAC/BBEG background analytical pieces, and met with senior science and technology leaders, donors and sector institutions, and USAID staff. A list of contacts and bibliography is attached.

I. Why S&T Forms an Essential Underpinning to Forge LAC Rural Prosperity?

Herein the economic legacy is contrasted with changing economic dynamics so as to formulate a new rationale to dramatically expand support for market-based S&T. New systems are needed such that agriculture, livestock, and forest producers and related agri-businesses and rural enterprises can more rapidly adapt and compete, thereby generating national benefits.

The fundamental precept: In today's, trade-driven era, country-level economic growth is linked to: 1) improving factor productivity from market-driven knowledge systems; and 2) implementing science-based regulatory and food safety requirements such that external market access is regularly gained. The ability of S&T services to contribute to rural growth, especially in the case of poor farms, can ameliorate the negative and enhance the positive effects of trade liberalization (Tabor 1995) . The processes for introducing new species and/or new varieties, cultural practices, processing technologies, and knowledge tools that have been developed via science-based basic, strategic, and applied research linked to and closely related to technology transfer mechanisms is essential to increasing rural prosperity. This is particularly so for higher-valued activities that inherently generate farm and off-farm employment and new income streams that generates broader rural-based services and products.

Earlier, sub-optimal economic environment and complementary S&T focus: Today's S&T demands differ notably from earlier era S&T system designed to complement the import substitution regime from the 1950s to the 80s. Government sponsored and donor supported agricultural S&T focused mainly on increasing food staples productivity per land unit within a public sector, along "national," commodity-specific programs. Important contributions in improving food crops were provided which generated positive rates of return on research investments, averaged usually more than 20 % per year (Pardey and Alsoton 1995). However, the inherent in-country inefficiencies associated with import substitution, thwarted maximizing economic potential from the rural sector.

Essential national S&T knowledge systems not in step with economic shifts and trade-driven realities: Beginning in the mid 1980s and in the context of Structural Adjustment and the complementary lending programs (SAL), macro- economic reforms introduced the new economic era. Under SAL, governmental attention to agriculture began to wane since "market forces" would respond "rationally" across all sectors. At the same time, SAL budget reforms sparked major budgetary reductions for rural investment-- and particularly for agricultural S&T. Paradoxically, S&T support system capacities eroded notably just as SAL-induced complementary developments required access to market-responsive S&T systems. For example: 1) SAL-generated policy reforms caused overvalued currencies to be revalued requiring tradeable products to be price competitive via improved efficiencies; 2) The Uruguay Round of trade talks launched in 1986 and finished in 1994 resulted in systematic trade liberalization with tropical crops reduced by 42 % and grains to 36%; 3) Most countries liberalized trade as 40 separate bilateral and regional tariff reduction initiatives have been signed. (Diaz-Bonilla 1999) and are heavily dependent on international capital markets; 4) The new round (Doha Development Agenda) will advance trade liberalization (tariff and subsidy reduction) in agriculture globally, while the Western hemisphere's 34 countries are on track to establish the Free Trade of the Americas (FTTA) by 2005. Within these dynamics, little to no consideration has been given to the implications for new S&T capacitates.

A base for generating rural prosperity begins to emerges: Recent analysis demonstrates that when appropriately supported, the previously under-appreciated/utilized land, labor, and agro-climatic "comparative advantages" become "liberated" under SAL. This supports Asian "tiger" and Chile's experiences that demonstrate that agriculture and closely tied rural sectors have the potential to generate much-needed jobs that increase salaries while increasing exports. For example, IFPRI research observed that in those countries where the highest degree of market-based reforms have taken place, agriculture has become a leading or the lead economic sector, exports expanded, and most importantly, economic growth has improved notably (Bathrick1998).

LAC agriculture begins sub-sector shifts that generate national economic benefits: Gradually, LAC countries agricultural sectors have responded to macroeconomic reforms

in ways that begin to generate broader economic impacts. They have began to make shifts away from the commodity mixes prevalent during the old import substitution era which focused on self sufficiency and towards investments producing market-led, higher-valued commodities with greater value added potential. As documented in a USAID/LAC - sponsored study, beginning in mid 1980s, in those LAC countries that had responded to the new policy environment, fundamental sub-sector shifts occurred from less remunerative cereals to higher-valued meat, fruits, vegetables, and oils and this contributed to more robust trade and economic growth rates. Further, those counties showing the largest annual GDP increase also showed the most dramatic increases in agricultural diversification and total sector growth. (Bathrick, Byrnes, and Stovall 1996).

To accelerate this economic transformation process such that rural prosperity is strengthened, a complementary, market-based science and technology support mechanism becomes one essential national priority. From this, producers and related agri-businesses and rural enterprises and industries can more likely and rapidly adapt, compete, and gain as tariffs are reduced, complementary public and private sector investments are intensified, and market shares gained.

II. Changing Dynamics and Related Institutional Responses Affecting LAC's S&T Needs

Given the essential role S&T performs for helping stimulate rural prosperity, a discussion of today's major issues and country and donor responses to new economic and trade shifts is provided.

Some dramatically different S&T-related issues affecting rural prosperity are emerging

More dynamic rural sector and national level multipliers now possible: In response to macro reform, markets and urbanization, and global competitiveness, "agriculture" has shifted strategically from a production focus to a more food and agro-industrial system. This system is capable of generating significant value-added contributions in terms of 1) increased jobs and wages and 2) generally under-valued contributions to national GDP. Based on a review of labor intensity of 19 export crops a range from 20 to 30 person days per hectare for broccoli and melon to 600 person days for snowpeas--with the average at 123 was noted (Carer, Barham, Mesbah, and Stanley 1955). Further, when "agriculture's" GDP account is broadened to embrace agriculture plus the agriculturally related inputs to manufacturing and service sectors, the sector's contributions to national GDP triple or quadruple (Pryor and Holt 1999). IFPRI shows that for every increase in $1 in production agricultural output in Latin America, overall economic output was increased by almost $4 (Pinstrup-Andersen, Lundberg, and Garrett 1995).

Significant numbers of produces are now vulnerable and will be challenged increasingly: With trade liberalization, a large number of producers will need to diversify or confront farm enterprise crop/activity adjustments, or if not, continue to migrate to

already crowded urban centers. In the context of expanded sub regional, FTAA, WTO trade arrangements, millions of producers view themselves inappropriately equipped to compete . The vast majority of the non-staple commodity producers generally find themselves in a sub-optimal situation vis-a-vis external market opportunities and potential competitors. Also, most of the staple food producers--who form the largest agricultural sub-sector, recognize that they can not compete with cheaper commodity suppliers. For example in the case of Mexico, some 4 million producers of maize, rice, coffee, and sugar now view themselves as non-competitive in the face of cheaper suppliers. They see no alternative employment options except to go "north" (New York Times 2001). For those producers who; 1) have sufficient assets, 2) are agro-ecologically well endowed, and/or 3) have access to markets, alternative strategies are urgently needed.

The new era S&T agenda is more expansive: To generalize, except in the case of Chile and maybe along certain commodities such as asparagus in Peru, cut flowers in Colombia, snow peas in Guatemala, and a variety of nascent NTAE experiences in Central America, the fundamental S&T support systems are lacking. In the old era, agricultural S&T focused on genetic improvements for a few species of common food crops (Pineiro 2000) whereas today, the agenda deals with broader productivity, efficiency, and market access needs.

Increasingly demanding "competitiveness enhancement" production and post-harvest technologies, and new knowledge of plant and animal health, food safety regulatory requirements, etc. are needed. In addition, a broader range of related natural resource management and conservation practices will require attention to sustain one of LAC's most valuable production factors--its diverse agro-ecological setting. Business and technology skills will be required to respond to rapidly emerging opportunities

What this all means in terms of S&T capacities? During this critical crossroads period, new, market-driven S&T support system to generate knowledge and efficiency provide an indispensable element to forge much needed economic, social, environmental, and political wellbeing. Dr. Martin Pineiro, one of LAC's most respected agricultural development leaders concludes that the development of differentiated plant products will require the package statements of provenance, safety and quality certification. New institutional mechanisms and technologies will address these requirements whose development requires a joint public and private effort. In this area "Latin American technical and institutional weakness in these areas is considerable (Piniero 2000).

Country–level responses: An overview of public and private sector support to S&T. In today's changed environment, well-regarded LAC rural growth strategists conclude that in many areas the promotion of agricultural growth should be a first priority in support of rural development, particularly high value-added crops and farm enterprise activities produced for agro-industry, non-traditional exports, and labeled products for niche markets. Furthermore, within this setting, improved technologies become important sources for agriculture and for poverty reduction (de Janvry and Sadoulet 2001).

Declining LAC country support to agricultural S&T: During the four decades of import substitution, government-led but with commensurately large donor support, was directed to the expansion of the "National Agricultural Research Institute (INIA) models. INIAs became the major purveyors of research and extension services of inward-focused, "national" commodity programs, Generally speaking, they lacked strong links with the private sector, stakeholder producer associations and agri-businesses (McMahon 1995) . They generated almost no domestic support base and seldom confronted national "competitiveness" issues. .

As mentioned in Section I, beginning in the 1980s INIA capacities eroded notably. By the mid-80s, average producer per scientist ratio for the LAC region as a whole showed widespread and substantial declines (Pardy and Rosesboom 1990). Compared with other regions of the world, after showing the highest annual budget increases in public sector agriculture S&T from 1976-1981 (9.5%), for the periods 1981-86 and 1986-91 they fell to the lowest growth rates (.5 % and .4% respectively). From the period 1991-96, this trend bottomed out and began to increase to 2.9 %. This upturn put LAC one level above Sub Saharan Africa for next to last place and way below developing country averages worldwide showing annual increases of 3.6 % ((Pardy and Beintema 2001).

The introduction of institutional innovation: Commensurate with these truly disconnected institutional responses to changing economic order, beginning in the 1980s, some innovative, quasi-private foundations were created. The focus was to provide more technical focus, ensure institutional responsiveness, and to generate broader financial support. In some countries, new models were created to capture more funding. However, after more than a decade, most of these foundations were receiving 80 to 90 % of their funding from their governments and this was at about the same level observed before the reforms (Pardy and Beintema 2001).

Private sector support to agricultural S&T: While public sector support is far and away the largest support base, private sector S&T support began to expand notably in the 1990s. Big jumps in Chile, Argentina, and Brazil and in some smaller countries were observed. For example, by 1996 in Panama, private sector agricultural S&T was estimated at 7% of the total. However, overall in LAC, only 3.8% of the total $100 million in 1996 was from private sector sources (Pardy and Beintema 2001).

Comparative S&T institutional "competitiveness" capacities: Concrrently throughout LAC the increasingly favorable policy/trade environment did not mesh with the essential S&T capacities now required. As increasingly national economies compete more vigorously, this structural disconnect becomes more alarming. An IICA review of national capacity among 22 major agricultural products serious "competitiveness" issues were disclosed CIICA 2001). Smaller and medium countries are particularly vulnerable for to generalize, the bigger and all Southern Cone counties posses the better S&T systems, to include to a smaller degree Mexico and Colombia (IICA 2001).

Donor-level responses: An overview of USAID, IDB, and World Bank activities: In the earlier era, particularly from the 1970s, donor-level programs provided crucial

support for INIA formation. This support peaked in LAC in the mid 1980s at well over $300 million and then rapidly declined. Currently, donor support to agricultural research has eroded to about $10 million annually, the lowest level since 1961 or about 15 % of the annual governmental level (Beintema and Pardy 2001). In response, innovative institutional approaches have been introduced.

USAID: Beginning in the 1950s by USAID predecessors, and expanding in the 1960s and 70s via USAID, agricultural S&T institutional bases were established in many countries. A broad range of research and extension support activities were developed to include extensive links with US Land Grant Universities, U.S.D.A, and to establish productive relations in basic and strategic research with the International Agricultural Research Centers (IARCS) –principally CIMMYT ,CIAT, CIP for wheat and maize, topical crops and livestock, and potatoes respectively. As USAID's agricultural support budgets expanded from the mid 1960s to the mid-1980s, the technical support base expanded to include links with the US and international private sector and NGOs, and a series of global focused, theme-specific global programs-- Collaborative Research Support Programs (CRSPS) under Title XII were launched.

According to a comprehensive worldwide review of agricultural S&T programs done under a joint USAID /World Bank study, from 1952-96, agricultural research support peaked in 1987 at $220 million (Alex 1997). Though no regional breakdowns are available, from this study about $20 million was for LAC's INIAs in 1987. This was supplemented by considerable PL 480 commodity support to cover essential host county counterpart support for local costs. USAID levels also declined notably such that by 1996 (the last time detailed data was available), the INIA support level worldwide was $6 million, from which an estimated $1.5 million was for LAC's INIAs. Based on this trend, the researcher projected, "USAID is in danger of becoming a minor player in its support to international agricultural research" (Alex 1997).

Programmatically, during this period of dramatic decline, two important innovative institutional thrusts are noted; 1) Private Sector Foundations and 2) Non Traditional Agricultural Export (NTAE) support.

1) Private Sector Foundations: -Beginning in 1984 and expanding, USAID supported in Honduras, Jamaica, Peru, Ecuador, and the Dominican Republic initiated new private sector research institutions as an innovative approach to better ensure quality and stimulate broader support. A comprehensive evaluation of this effort flagged inherent structural barriers that impeded their sustainability. Unless systematic corrections were done, innovative programs would last only as long as the USAID project (Sarles 1990).

2) NTAE Support: Beginning in 1986 and directly responsive to the improved policy environment, a pioneer program in Central America commenced. The program focused on technical assistance in 14 product lines with enterprises trained to provide essential support to small farmers. A subsequent analysis of this experience concluded

that ".. there were particularly positive effects on higher wages , including the creation of new jobs and improved working conditions" (Damiani 2000).

USAID/LAC's current regional support portfolio: At the USAID/LAC level there are a two trade capacity building initiatives that deal with S&T. The key elements of the LAC "Trade-Related Capacity Building Project" that relate to food safety and animal and plant health are covered in Section IV. The other project, "Increased Central American Competitiveness in Global Markets" deals with support activities that relate to trade policies, WTO negotiations and labor markets. These support projects assist host country officials to prepare the regulatory systems required to "play by the new rules" so that U.S. market access can be provided. Regional support programs to begin to prepare the large numbers of rural residents with the other S&T more production-related capacities were not however observed in the portfolio. A listing of current mission-level projects did not indicate support activities.

Inter-American Development Bank (IDB) : The IDB has been the largest LAC door to agriculture. Support peaked in 1985 at $950 million and plummeted to around $10 in 1993. While all donors are now working to pursue new rural sector development initiatives, the IDB is the only one that has seen funding levels reverse and now increased to over $100 million (IDB 2000). Over the last two years the IDB has given considerable attention to raise rural sector visibility via research activities and major conferences and strategic planning activities (IDB 2000).

Regarding the IDB's S&T investments, over the life of the IDB, they have invested 5.5 % of their total agriculture and rural development portfolio for agricultural S&T. Their most important S&T activity is the Regional Fund of Agricultural Technology (FONTAGRO). This is an endowment fund initiated in 1998 with a target of $200 million. Bank members have provided currently around $30 million, of which around $3 million is for actual LAC research support. During the first two years via a competitive grant mechanism, they awarded 12 research proposals. The research portfolio is a diverse range of mainly CGIAR-related activities. Of the 24 projects, 17 have direct Center participation.

The World Bank: Some years ago in response to the World Bank's president's concern that poverty could not be addressed in any meaningful way unless they better supported agriculture and rural development, the Bank launched its "Rural Development Vision to Action" planning activity. During this same period sector resource levels have further declined. However, over the last year plus this effort has been revisited and in that regard the Bank's LAC region (as have other Bank regions) has generated their input to this re-invigorated Bank commitment. When approved by the Bank's Board, their LAC strategies can be more broadly shared. Within this strategy, they do place great impetus on rural sector knowledge generation systems.

III. Fundamental Policy and Institutional Suggestions for Launching the New S&T System for LAC Rural Prosperity

Building from sound economic policies and the demonstrated opportunity for generating rural prosperity in this increasingly competitive world, a new battery of institutional adjustments to include research and development and technology transfer become essential (Quiroz 2000). This need becomes critical given the absence of an appropriate knowledge generation system in the face of WTO and FTAA realities commencing in 2005. Some basic policy and institutional suggestions are provided.

Creating a more pro-rural/pro- complementary S&T national commitment: In today's era, national-level investments in science and technology become an essential, national political priority. It appears that LAC is behind their competitors in a critical sector across numerous product lines. However, LAC's import substitution legacy forms a powerful inter-connected economic and political impediment thwarting rural investment.

In this setting, an interesting comparison with Asia during the Tiger era, proves useful. For their rural sector to stimulate successfully broad-based economic growth nationally, "competent and active government" was required (Timmer 1995). To create the required pro-rural sector commitments, policy makers and business leaders, producer associations, and political leaders will have to foment a support base such that new national "directions" and national "ownership" are stimulated.

Formulating a national, new era S&T program frame: Today's diverse and complex technology demands surpass the "national" commodity structure that supported "production–driven" systems of earlier programs. Little, alternative S&T systems have been introduced in the face of changed economic realities. In today's rapidly different era where rural residents gain incomes from multiple sources, though "agriculture" remains critical given its multiple effects, "technology" must be cast more broadly. "Technology has an important role to play both through indirect effects in their roles as workers and net buyers of food and through direct effects in their roles as wholesale producers of their own food needs" (de Janvry 2000) . In this setting a new, Rural-Based Knowledge System focusing on three priority, interrelated themes becomes critical; 1) competitiveness, 2) natural resources, and 3) rural poverty alleviation.

Competitiveness: Increasingly, country-level competitiveness will be determined on specific points related to commodity specific market share, comparative costs of production, relative export advantage, and related competitiveness support (Blackman, Shui, Cramer and E.J.Wailes 1992). Export product entrance requirements for establishing market shares will be the available only for those fresh and processed commodities that meet WTO standards. The challenges in all of these will be to be able to access where possible, or improved local sources for the appropriate variety of species "x "that has market demand and conduct adaptive research in the most appropriate agro-ecological zone. New methodologies to provide cost effective but exacting technology diffusion for production and increasingly labor-intensive, highly exacting, post-harvest technologies, also become essential. NGO or other institutional arrangements also become appropriate to conduct increased attention to adaptive practices that increase

efficiencies. Other S&T needs related to food safety and bio-technology safety regulations also become increasingly essential.

2) Natural Resources: Under the new economic environment, the natural resource base to include soil, forest, genetic, and water resources becomes the base from which current and future growth prospers. Consequently, given the increasing degradation of these resources, under the new framework technologies to reverse deforestation, soil degradation, overgrazing and loss of bio-diversity become an imperative. "Green Seal" type technology certification systems, organic certification practices and science-based coffee shade grown habitat for topical birds become market-driven S&T activities that generate additional value, while enhancing the environment.

3) Rural Poverty Alleviation: While a more dynamic, food and agro-industrial system will form an essential role for creating numerous multipliers, some rural residents will be displaced either by not being competitive with alternative suppliers, or by not finding suitable non-tradeable-related employment. Since most of the affected are the highly vulnerable cereal producers, they will probably be in a position to employ an interim land alternative strategy to maximize family subsistence needs on smaller land units. This option is described in Section IV. Other S&T knowledge systems are needed relating to handicraft production, eco-tourism promotion, and the growing number of new off-farm employment opportunities projected.

Facilitating the new era institutional model: To generalize, the INIA institutional framework does not serve the demands now required. New era public good issues need to be defined and promoted to generate private sector political and financial support. A broader governmental presence in a facilitating supportive role plus a new private sector support base to include producer associations, universities and NGOs is probably required. In the evolving multi-sector and multi-institutional world now emerging, other ministries than just agriculture need to interact in mutually supporting ways to facilitate support to this generally marginalized sector; i.e. trade and commerce, environment, economy and finance, health, and science. While this national-level support base contemplates this activity and designs the new mission and support elements, a broader array of complementary international support experiences should be considered. These include; the range of international crop, problem, and discipline specific global networks organized by the CGIAR, USDA, and also under USAID's Collaborative Research Support Program (CRSP) and the reformulated support program evolving from USAID's "New Agricultural Strategy" exercise now under way. Some NGOs and consulting company experiences provide new front line adaptive research and technology outreach experiences to provide the interim experiential base until more sustainable institutional bases are in place.

Stimulating common donor focus and coordination. While donor support declined notably during the 1990s, all key donors are now finalizing strategies to prepare for new needs. There is an urgent need to ensure effective donor coordination for LAC's S&T system in the context of the FTAA. USAID and the US Executive Directors in the Bank could do much more to stimulate urgently needed strategic and county-level program

coordination. In this regard, the concept of donor-level institutional comparative advantage becomes important.

IV. Suggested Activities and Areas of Importance for Launching the "New Era" Agriculture Science and Technology Program

Given the many structural issues and institutional reforms required, new S&T efforts organized by national leaders and facilitated by donors become essential pillars. Some of the initial support activities are described.

Conceptualize potential product lines and outline support requirements around real and potential "comparative advantages:" The smaller and medium-sized countries are particularly vulnerable due to their limited S&T capacities and in some cases, limited opportunities. They will require assistance to conduct the necessary assessments of market opportunities, agronomic potential, and cost factors to help guide assess their future strategies. Based on available data and in consultation with major agribusiness and country-level commodity leaders, an effort should be made to sketch out and analyze the prospective potential "winners." IICA, IFPRI, and USAID have done studies on country-level comparative advantages and competitiveness approaches which help provide initial framework. However, within these studies there are methodological inconsistencies. To help provide some initial guidelines from which greater assurances generated and interests mustered, more rigorous reviews of the methodologies must be done and closer examine of ongoing country projects of promise also undertaken to include external "intelligence."

Within this framework, national and international expertise particularly from the business side can interact to serve as a base for developing S&T agenda to include the initial articulation of public and private sector roles and responsibites. This process also would help mobilize essential political commitments and business interests. "Competitiveness" themes begin to be strategized and institutionalized broadly, and a base for forming new, private/public partnerships is established.

Initiate a participant training program to form a new era critical cadre of MS and selected Ph. D. personnel: There is a great dearth of technical skills that in a selective way, must begin to be addressed. In addition, local applied, vocational training in select areas will also become a requirement. Early on while design work is underway, targeted disciplines will be determined and guarantee postings provided upon graduation to ensure maximum developmental impacts.

Develop an outreach program for the utilization of improved technologies for basic food producers as a crucial "Alternative Strategy: Most of LAC's small producers are maize, or other cereal producers . For this large grouping, a particularly daunting challenge prevails as tariff reduction expose many to cheaper producers. Competitiveness issuers become real. For this group, alternative employment options will be extremely limited for those displaced until a broader range of employment activities and a more robust economy is in place. In the meantime, at least subsistence needs must be

confronted while many of these producers, explore other land use pursuits to include livestock, tree crops, or mixed farm/non-farm activities. Therefore, a major priority is the introduction of technologies that reduce per-unit costs of production and as appropriate, reduces production areas for these crops thereby providing additional land to undertake more remunerative pursuits . As trade liberalization negotiations expand, there is an urgent need to engage CIAT and CIMMYT and maybe appropriate USAID CRSPs (Intsormil for example) to assess the status of current technology and existing outreach capacities. From this review to include tentative farm budgets, a base for determining the broadest use of improved technologies and program elements for implementation is made possible.

Consider specific technical areas of increased importance: In conjunction with the trade liberalization process which increasingly focuses on consumer safety and new tools related for enhancing competitiveness via rapidly advancing biotechnology, computer, and learning technology applications, USAID/ LAC places special importance on areas as biotechnology, food safety, plant and animal health, and ICT. This thrust is very complementary with IDB thinking. "The new opportunities provided by trade liberalization make it essential to accelerate the process of technological development to increase production in a way that is competitive and sustainable over the long term" Echevarria 2000b).

Biotechnology: There is considerable attraction to biotechnology for its opportunities as a positive crop improvement tool to address multiple needs. Important biotech products include pest resistance, improved yield, biotic tolerances, nutritional benefits, and reduced environmental impact (National Academy of Sciences 2000). In the U.S., where 50% of the trials have occurred world wide (Pardey and Beintema 2001), genetically engineered food crops also include canola, rice, tomatoes while other crops such as sugar beets, wheat, squash, papayas, berries, bananas, and pineapples will be going through the approval process for marketing (Congressional Research Service 1999). Worldwide, by far the greatest area expansion for genetically modified organisms (GMOs) has been with cotton, maize, and soybeans. Less than 29 % of the biotechnology trial work has been done in developing countries (Pardy and Beintema 2001). Iin these countries, limited wide scale use by small farmers of GMO work has been observed.

In LAC, Argentina is the unique world leader (with the US and Canada), being the second largest exporter of genetically engineered crops, almost all of which is soybeans, more than 90% with 5 % for maize. Both GMO production systems were developed with leading tans-national companies (Burachik and Traynor nd). The other LAC GMO using countries are no where close to Argentina's dramatic expansion over the last 10 years. They include Mexico, Venezuela, Colombia, Bolivia, Brazil, and Uruguay (New York Times 2001). While GMO agricultural products in LAC hold "promising results for agricultural productivity " this potential is constrained by the universal concerns associated with human health safety and affects on bio-diversity (Diaz-Bonilla 1999).

This wide spread fear and concern requires that highly professional national-level bio-safety systems be in place for all insist that strict standards for safety related to human

health and environmental must first be in place. In their absence, private sector biotech investments are reduced, local product sales limited, and product entry for exports is denied. In the context of this report the absence of such capacities forms one of the region's biggest barriers (Cohen 2001, and Pardy and Beintema 2001).

Since throughout LAC country-level capacities must become more competitive, a timely assessment of current capacities, needs and potentials requirements related to bio-safety should be undertaken. From this assessment, a basis for exploring alternative support, possibly via a regionally-based equivalent service mechanism, can be explored.

Food Safety: A review of the Congressional Research Service's regular Food Safety Reports reveals the increased importance the U.S. places on food safety, due in part to the increased arrival of imported food products, preserved and fresh. In 2000 the President asked for a total $421 million to carry out the Food Safety Initiative (Congressional Research Service 2000 and 2001). This vigilance will become more serious in the context of the FTAA for as tariffs are dropped, science-based food safety inspection systems will be enforced. Food safety attention becomes much more complicated in the context of the emerging producer to processor to export to consumer "chain" with increased chance for contamination.

In this setting, IICA's recent assessment concluded that in LAC there was a "different imbalance" as to the status of their institutional, regulatory, and technological capacities. This relates to installed capacities in terms of standard setting, and the relationship between national legislation and international regulations and their equipment and capacities. While they concluded that much progress had been made in the regulatory arena overall: 1) LAC countries play only a small role in international reference organizations; 2) risk analysis units either do not exist or are inadequate ; 3) there is little interaction between the public and private sector; and 4) there is an absence of information and surveillance systems to support decision making" (IICA 2001).

In response to these dynamics it is important to note USADI/LAC's sub-regional program approach under the "Caribbean Agricultural Competitiveness Program." Beginning in 1998 and working through CARICOM, a series of technical support services to assist the Caribbean countries to respond to principals set forth in the "World Trade Organization Agreement on the Application of Sanitary and Phytosanitary Measures. Under this agreement, attention is directed to: 1) Hazard Analysis Critical Control Points (HACP) certification; 2) risk assessment analysis, legislation to strengthen surveillance, quarantine vet drugs , plant health, food control and quality, pesticides and toxic chemicals; and 3) Testing procedures and protocols to enforce standards.

Considerable interaction has been done to expand this activity in Central American where dialogue continues. In the Andean region, however, little interest has been generated. In the context of the important gap this effort is addressing, minimal support to help foment large numbers of future trading partners with the basic tools to function—becomes a most worthy investment.

Animal and Plant Health : Though very much related to Food Safety, the focus herein is more on the prevention and eradication of pest and disease from crops and livestock as noted above. In addition, human health concerns, for example pesticicide residues form the other major food safety grouping. There are broad economic concerns for receiving countries of unhealthy animals or plants that might affect similar species or native fauna and flora. If not appropriately diagnosed and/or quarantined, they have the potential for causing considerable damage. On the animal health side, in LAC the principal concerns relate to foot and mouth disease, poultry influenza and Newcastle disease, and classic swine fever. For plant protection issues are much more extensive starting from the larger number of insect born plan diseases (IICA 2001). Rigorous, science-based public sector institutions conduct a standard series of activities related to clear health and trade policies and precise standards, technical audit and inspection mechanisms, and quarantine controls, and disease and pest eradication.

Information Communications Technology (ICT). Resulting from considerable advances in internet and electronic commerce and their application to the needs of the developing countries, exciting opportunities to provide new cost–effective knowledge systems becomes possible. This was the message with the launching in the White House in 1998 of the Internet for Economic Development (IED) done to help "bridge" the digital divide between the developed and developing world. Particular benefactors of this new era will be isolated rural residents where communications and access are so expensive and spotty while new realities further restrict them if access is not provided. There are some examples to illustrate this new bridging. Under a FAO-sponsored program they have been able to develop "public call offices" in Indonesia such that via satellite and cellular telephone links, villagers can greet distant kin and farmers obtain market prices on crops where time differences cause major shifts. In an Internet electronic information system farmers in Senegal were able to obtain premium prices for their product and presented with new varieties more relevant to miller's needs. The Bureau has seen the utility of these technological applications to development and has just contracted an ICT specialist with considerable international experiences.

Conclusion

Our increasingly inter-connected world is passing through a time of unprecedented change and uncertainty. Access to appropriate knowledge becomes a major impediment while currently, country capacities are of questionable merit. A Rural-Based Knowledge System focused on competitiveness, natural resources, and poverty amelioration is needed to help provide millions with critical skills so that they may begin to adapt, compete, and win. President Bush has placed great hope on the successful launching and functioning of the FTAA. Targeted U.S. assistance to help formulate large and beneficial participation will be crucial to ensure the promised mutual gains FTAA signatories aspire. USAID, because of its rich inventory of diverse S&T experiences and current ties to US and international centers of excellence, universities, agribusiness, and commodity groups is uniquely positioned to provide critical, technical assistance and training and services to work with donor partners such that unparalleled, mutual benefits can emerge.

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BIBLIOGRAPHY

Alex, G. 1997. *USAI D and agricultural research.* The World Bank. Washington, D.C.

Bathrick, D.D., K.Byrnes, and J.Stovall.1995. *Technology institutions for agricultural free trade in the Americas (FTAA).* Washington, D.C., Chemonics International.

Bathrick, D. D,, 1998, *Fostering global well being: a new paradigm to revitalize agricultural and rural development.* 2020 Vision Discussion Paper. Washington D.C. International Food Policy Research Institute.

Beintema N..N. and P.Pardy. *2001. Recent developments in the conduct of Latin American agricultural research* ISNAR. Washington, D.C.

Blackman, D.W., S.Shui, G.L.Cramer, and E.J. Wailes. 1992. *Comparative advantage and competitiveness among major rice producing countries.* Arkansas Farm Research. 41: No.2 9-10.

Burachik, M.S. and P.Traynor. *Commercializing agricultural biotechnology products in Argentina.* ISNAR. The Hague

Carter, M.R., Bradford Barham, Dina Mesbah, and Denise Stanley. 1995. *Agro- exports and rural response poor in Latin America.* Land Tenure Center, University of Wisconsin. LTC Paper 125,.Madison,WI.

Congressional Research Service. 1999. *Food biotechnology in the United States.* The Library of Congress, Washington, D.C.

Congressional Research Service. 2001. *Food ssafety issues.* Washington, ,D.C.

Cohen, J.L. 2001. *Harnessing biotechnology for the poor.* ISNAR. Washington D.C.

Damian.O. 2000. *The state and non-traditional agricultural exports in Latin America.* Inter-American Development Bank, Washington, D.C.

de Janvry, A. and E.Sadoulet. 2001. *Concepts for an approach to rural development in Mexico and Central America.* InterAmercian Development Bank.Washington, D.C.

de Janvry, A. And E.Sadoulet. 2000. *Rural poverty in Latin America determinants and exit paths.* .Food Plolicy. 12 389-409.

Diaz-Bonilla, E. and L.Reca. 1997. *Changes in Latin-American agricultural markets* . Trad eand Macro economics Division Paper No . 24. IFPRI. Washington,, D.C.

Echevarria. R.G. 1998. *Strategic elements for the reduction of rural poverty in Latin America and the Caribbean.* Inter-Amercin Development Bank ,Washington, D.C.

IICA. 2001. *Status of and outlook for agriculture and rural development.* San Jose, Costa Rica.

Inter American Development Bank. 2000. *Agriculture and Science.* Washington, D. C.

McMahon. M. 1992. *Getting beyond the National Institute Model for agricultural research in Latin America.* The World Bank. Washington, D.C.

Pardy. P.G. , Julian Alston. 1995. *Revamping agricultural R&D.* International Food Policy Research Institute. Washington, D.C.

Pardy. P.G. and N. Beintema. 2001. *Agricultural R&D a century after Mendel.* IFPRI. Washington, .D.C.

Pineiro, M.2000. *Thoughts on agriculture in Latin America.* Inter American Development Bank. Washington, D..C.

Pinstrup-Andersen, P. Julie Babinard. 2000. *A vision for food, agriculture and the environment in Latin America for 2020. IFPRI Washington D.C.*

Porter, M.E. . MQuiroz, J.A. 2000. *Agriculture and the macroeconomy in Latin America during the 1990s.* Interamerican Development Bank. Washington, D.C.

Pryor,S.andT.Holt.1998.*Agribusiens as an engiene for growth in developing countries.* .U.S.Agency for International Development. Washington, D.C.

Quiroz, J.A. 2000. *Agriculture and the macro economy in Latin America during the nineties.* Inter American Development Bank. Washington. D.C.

Sarles, M. 1990. *USAID's experiment with the private sector in agricultural research in Latin America and the Caribbean.* Methods for diagnosing research system constraints and assessing the impact of agricultural research. ISNAR, The Hague.

The New York Times. 2001. *As biotech crops multiply, consume get little choice.* June 10. New York, NY.

Timmer, P.C., 199. *Agriculture and economic development revisited.* Research in Domestic and International Agribusiness Management 11: 73-116

Rural Prosperity White Paper: *Economic Vulnerability*

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Introduction

Poor people in rural Latin America are poor because the market value of their assets (human capital, physical capital and financial capital) is low and because their opportunities to augment these assets continue to be low, as well. The rural poor are also faced with recurring natural and economic shocks that tend to deplete the stocks of their meager assets or to lower the value of the output generated by rural families in seeking their livelihoods. As a result of these conditions, the returns to investments by the poor in their human and physical capital, including technologies to augment the productivity of these assets, has remained low. The topic for this essay is ***Economic Vulnerability of Poor Rural Households in Latin America*** within an increasingly integrating global market place. As such, it focuses on the role of economic risks and economic uncertainty faced by the rural poor in markets, and on how institutions and policies may serve to ameliorate the economic vulnerability of the rural poor as they seek to enhance or preserve the quality of their livelihoods.

As poor people seek to improve the basis for their livelihoods in the context of meager assets and limited market opportunities in the face of uncertainties of nature and economic conditions, they are often limited in their choices. Yet their choices are optimal responses to the opportunities, constraints and risks that they perceive given their experience and the available information in the relevant markets (labor, inputs and products). Such choices determine the levels of prosperity at any point in time and the prospects for improvements in the quality of the livelihoods of poor rural people. This view recognizes that the quest for well-being is dynamic and involves multiple economic activities by members of poor households, including the augmentation (or at least preservation) of human capital through nurturing, educational and health activities, other household production activities, participation in labor markets (local, regional and international), and in the production of goods and services for sale in markets (this includes as an important subset the production and sale of agricultural products or their derivatives).

The framework for the essay is to assess the potential to enhance the opportunities for poor rural people to achieve higher and more secure returns in each of these multiple (livelihood) activities–household production, labor force participation and production for markets. These higher and more secure returns are necessary for asset augmentation and, thus, for prosperity.

Economic Vulnerability of Poor Rural Households: A Definition

All human activity occurs in the presence of risks and uncertainty. Risk is the probability that the outcome realized from a given decision will differ from the expected outcome to such a degree that it has a palpable effect on the livelihood of the poor rural household, as such risks are in principle, measurable. A risky outcome can differ positively or negatively from the expected outcome, but the connotation is usually one of unexpected loss rather than gain. Uncertainty also implies divergence from a desired outcome, but the probability of a particular loss is not measurable or computable, even in principle.

Risk and uncertainty affect the valuation of the households activities whether or not the household participates in any market, because markets determine the opportunity value of any human activity including so called subsistence activities (Franklin and Harrell, 1985). Market conditions affect the value of the goods produced by the rural poor, the value of the complementary inputs used in production and the value of time which could be offered to labor markets. ***Economic vulnerability means that the value realized by the market for the products, inputs or labor efforts of the rural poor differs sufficiently from the value that was (rationally) expected so as to cause irreparable and unavoidable damage to the livelihood of the poor rural household.***

A rural family faces risk when it receives a lower (or higher) than expected price for the output it sells in the local market or for the income earned in off-farm activities. Uncertainty would be lack of knowledge that a buyer for a product will ever return to buy that product. In the labor market, uncertainty means the unpredictability of the possibilities for employment at a particular point in time or locale. Experience and information gathering serve as bases for measuring risk, and the measurement of risk can be used to make informed decisions. Lack of experience or information with which to measure risk implies uncertainty.

The poor are more vulnerable to risk or uncertainty, because their assets are meager, and because natural and economic shocks can often be devastating to their livelihoods. In terms of economic risks and uncertainty, economic vulnerability means that an outcome from an economic shock may place the poor rural household in an irreparable state which may threaten the essence of the households livelihood (loss of food security and/or earning power). The rural poor in Latin America often live in precarious conditions such as fragile environments (e.g. the Altiplano, jungles, tropical savannahs, etc.) with poor linkages to markets (subsistence production with few alternative employment opportunities). In these precarious conditions economic vulnerability means that the basics of life may be compromised for all or at least some of the households' members. Economic vulnerability also implies that such compromises to the basics of life (food, shelter, health, etc.) cannot be avoided through reliance on markets (by borrowing, for example) or reliance on institutions (e.g. social safety nets). Even when the environmental and markets linkage conditions are not severe, the rural poor live precarious lives, because their human, physical and financial assets are meager and their tenure rights over these assets can be uncertain.

Given the precarious nature of rural life, it is rational for the decision makers in poor rural households to assume that deleterious outcomes are likely in the presence of uncertainty (worse case scenarios). It is not a matter of preference for risk that is at issue in the decision making of poor households; often it is a matter of lack of information with which to calculate risks. In the presence of uncertainty or likely deleterious (risky) outcomes, poor households will under-invest in productive inputs in any given economic activity (Holthausen, 1975). In this manner, economic vulnerability affects current conditions of human well-being, but also serves to impede investments in human and other capital. Economic vulnerability punishes the present and the future livelihood for poor rural households in Latin America. Simply put, it is not that rural people are more risk averse than urban people, it is that rural life is more risky and uncertain than urban life, and such vulnerability is a major barrier to prosperity.

This essay concentrates on ***economic vulnerability*** that arises through the performance of markets as determinants of the value received by the rural poor for their efforts or as determinants of the availability and costs of basic consumption goods and services, as well as the factors of production used by poor rural households. While macro-economic, financial policies and institutional arrangements can have important and sometimes dominant effects on the volume, composition and vocation of an economy's output and thus on the livelihoods of the rural poor, this essay does not address these unless they have a proximal nexus with the ***Economic Vulnerability of Poor Rural Households*** in terms of market factors (prices, availability of basic needs, inputs, and services) and institutional factors (security of tenure over assets, availability of public services, economic governance), as well as specific policies that affect the prices and wages paid or received by the poor in rural areas of Latin America.

Sources of Economic Vulnerability of Poor Rural Households in Latin America

Within the framework for this essay, poor people are compensated for their efforts by the market valuation of the products and services produced, whether these are in fact sold in the market or used within the household. This framework treats poor households as "pluri-active" firms that may produce goods and services for sale in the market, may sell labor services outside the household (including local, regional or international labor markets) and also produce goods and services for consumption and investment within the household. The goods and services produced within the household in a given period of time may represent consumption or investment in human capital (or augmentation of other assets) that will be embodied in future output by the household (as products or as labor services). It is the excess or shortfall of the household's current output over the consumption for basic needs that creates the opportunity (or need) to augment (or deplete) the household's stock of human and other capital.

The sources of variation in market valuation of goods, services and assets that matter in the context of economic vulnerability, as defined above, are those that are unexpected, abrupt and large. In Latin America the world prices of traditional products have faced long-term declining trends and significant periodic variation around these trends. Often, these fluctuations have been abrupt and persistent. These conditions have led to a continual search for new non-traditional products as substitute economic activities for poor rural households, and there have been notable and sustainable successes in these efforts to diversify the economic base for rural Latin America.

These efforts at diversification into non-traditional products have produced important and secure improvements in rural livelihoods in many instances, but not always.

The principal sources of economic vulnerability for the rural poor in Latin America tend to be the consequence of domestic policies and institutions when markets are impeded from performing their signaling and resource allocative functions. For example, some countries still use input subsidies as development instruments (cheap energy, seeds, fertilizer or irrigation water). These, and other distortions of the prices that would prevail in markets that were allowed to perform their functions, implicitly produce rents to be captured (or implicit taxation to be avoided in the case of controlled prices). The rural poor, with meager assets, inadequate information and often excluded from political and social participation, are seldom able to capture the rents from subsidies or to avoid the taxation implicit in artificially low prices. When they manage to capture some benefits from the distortions, they are made vulnerable to their eventual disappearance, because the interventions are seldom sustainable.

Additionally, such policy or institutional interventions (intended to help the poor) in specific markets often result in fiscal deficits in the national budget, which ultimately are financed with inflation and/or financial repression. These economy wide effects almost always amplify the disruptions to product and factor markets in which the rural poor operate. When the inevitable adjustment happens, these markets are usually de-stabilized in substantial manners to the point of aggravating economic vulnerability for rural households. The current crisis in Argentina is but one of many examples of this phenomenon, which seems to be proto-typical of Latin American economies. The Mexican peso crisis in 1994/95 had similar endogenous origins to the current Argentine crisis. In more recent times, Ecuador has suffered from similar self inflicted sources of economic vulnerability. One of the collateral benefits of globalization and broad based "free"trading agreements such as NAFTA and the FTAA is that they create pressures for convergence of macro-economic policies among countries. This process will lead to a reduction of economic vulnerability for the rural poor in Latin America.

The variation of commodity prices around declining trends in world markets are often the rationale for domestic interventions that attempt to isolate domestic economies from such fluctuations and trends. For example, several of the regional trade pacts use reference prices or price-band systems among the members of a particular trading agreement (Andean Pact and CACM, for example). While such interventions, sometimes, achieve lower variance in domestic nominal prices, it is common for these systems to amplify the swings in relative prices (domestic terms of trade) to levels that exceed the variance in the external terms of trade from which the domestic economy was being "protected".

Economic vulnerability is also frequently produced (or aggravated) by direct public interventions in production and marketing decisions, such as forcing farmers to use specified marketing channels for certain products or in fomenting technological and product shifts in response to apparent new opportunities in global markets. This has occurred in several countries where the perception of "niche" windows for non-traditional products has been used by governmental and non-governmental promoters to foment transitions into "new"markets with the expectation of sustainable high returns from serving such "niche" windows. Eventually, these "windows"

disappear as other entrants also attempt to serve the window, and the commodity prices tend to regress toward their long-term (average) trend. Such results should not be judged as failures of diversification efforts, they are failures on non-market interventions in the diversification process. Entrepreneurship involves the constant search for new markets which offer higher rewards to the productive factors.

The essence of entrepreneurship involves perceiving opportunities, measuring the risks, and seeking to capitalize on such opportunities (Schultz, 1975). Public and institutional services that help rural entrepreneurs with information and transparent regulatory environments will help reduce economic vulnerability. Institutions such as market news and information systems, weather and climatic information, among others are the types of public/institutional interventions that help entrepreneur measure and manage risk. Interventions that seek to isolate rural entrepreneurs from risk tend to also destroy opportunities and the ability to augment human and physical capital.

Another very important source of economic vulnerability for the rural poor in Latin America is the insecurity of tenure over assets, such as land and other usufruct rights (e.g. water rights). These sources of vulnerability date to archaic concepts of property and inadequate systems for registration and conveyance of rights. As a result the assets used by the poor are seldom usable as collateral for credit or as the basis for risk sharing arrangements with potential partners (De Soto, 2000). Insecure tenure over assets lowers the availability of complementary inputs and the productivity of rural labor and, thus, the returns to public and private investments in human capital. USAID has an opportunity to build on its tradition in land tenure rights by extending its work into other areas of property rights, including further work on the institutional arrangements for conveyance of title to property and the legitimate transfer of ownership. Paradoxically, a title that cannot be expropriated has little value as a commercial asset. In countries like Mexico, the reform of communal land holding has been partial and limits small farmers' (ejidatarios) ability to enter into profitable smart partnerships with larger firms.

Strategic Priorities to Ameliorate Economic Vulnerability of Poor Rural Households

A Rural Prosperity Strategy based on enhancing the forward and backward linkages of rural enterprises with the global economy will reduce economic vulnerability if the interventions and innovations are reliable, credible and sustainable. To achieve sustainability the strategy would ***promote market-based enhancements to the links between rural enterprises and the global economy.*** Each element of a link involves risk, but risk can be reduced, measured and risk bearing and sharing mechanisms can be introduced through market-oriented institutional arrangements.

The strategy should emphasize ***support for entrepreneurship*** because the essence of entrepreneurship is to calculate risks and to innovate and produce within the context of risks. Such an approach, focused on risk taking emphasizes the role of entrepreneurship in seeking new and higher value markets, in meeting the ever more demanding requirements of such markets with high quality factors of production (skilled workers along with modern inputs and technologies) and through cooperation among competitive firms to ensure the provision of

support services (including collective risk bearing or risk sharing mechanisms) and an enabling policy environment that is free of induced risks. The forward and backward linkages of firms within the marketing, logistics, and distribution systems for the products of poor rural households whether as workers or as entrepreneurs, and the backward linkages involving input supplies, modern technologies, and in some cases, the output from other agricultural enterprises all contain risks and uncertainties. The challenges is to provide developmental initiatives that enhance the ability of poor rural household to perceive and measure risks, as well as policies and institutional arrangements that, at a minimum, avoid inducing further risks. Beyond this it is important to help ***foster market oriented mechanisms for pooling and bearing economic risks, as well as fomenting sustainable safety nets for bearing economic and natural uncertainties that cannot be addressed through market-based mechanisms.***

In addition to benefitting from truly neutral policy frameworks, the rural poor can benefit from the provision of truly public goods that are not appropriable by the rich. Public information on market and weather conditions that is reliable, timely and credible can be of great value to the rural poor. The USAID LAC Strategy for Rural Prosperity can support governments to identify such opportunities and to develop the means to supply such public services, sustainably. Timely and reliable information on all aspects of the linkages for rural enterprises can be an important publicly or collectively provided service. Information on prices and their trends in different markets for different products is a valuable service. Collectively administered systems of products grades and standards can enhance the value of market information. Information on transportation schedules, rates, conditions is also important for global commerce. Each node in a forward and backward linkage for a given cluster of rural enterprises can be assessed for the potential role of information services as a public or quasi public service that is sustained collectively by its users.

The Rural Prosperity Strategy and the elements within it should avoid "picking winners", whether sectors or firms. The strategy should continue to ***support public/private dialogue to promote and sustain economy-wide flexibility in financial markets–macroeconomic stability, fiscal prudence with a trade regime characterized by low, uniform and simple tariffs with a minimum of trade distorting non-tariff barriers.*** These measures will serve to ameliorate much of the policy induced vulnerability which the rural poor have faced as a consequence of the domestic rules for assigning privilege to urban elites.

The key to success in a new Rural Prosperity Strategy is to recognize the central role of rural households as risk bearing entrepreneurial firms, and to ***develop all interventions and proposed actions with the full and informed participation of the rural population*** in the planning and implementation of such a strategy. Market oriented "Business Associations" of rural enterprises have a vital role to play and indigenous non-governmental organizations can be an effective vehicle for providing support to enhance participation by the rural poor. To avoid increasing vulnerability, such associations and organizations must be sustainable through autonomous means lest the dependence on USAID support results in increased rather than decreased vulnerability.

Bibliography

Bordo, Michael D. and Marc Flandreau. "Core, Periphery, Exchange Rate Regimes, and Globalization". *National Bureau of Economic Research Working Paper Series,* 2001, no. 8584.

De Soto, Hernando. "The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else". *New York, Basic Books,* 2000.

Dollar, David and Aart Kraay. "Growth is Good for the Poor". *The World Bank,* March 2000.

Franklin, D.L. and Alberto Valdés. "Trade Policies, Relative Prices, Real Incomes, and Food Consumption in Peru". *The Bias Against Agriculture.* Edited by Romeo Bautista and Alberto Valdés. International Center for Economic Growth and ICS Press, San Francisco, 1993

Franklin, D.L. and M.W. Harrell, and J.B. Leonard. "Income Effects of Title II Commodities in Rural Panama". *American Journal of Agricultural Economics,* February 1987.

Franklin, D.L. and Vial de Valdés. "Estrategias Nutricionales de los Hogares Pobres: Los Pobres Tambien Escogen". *Cuadernos de Economia,* Agosto 1985.

Franklin, D.L. and M.W. Harrell. "Resource Allocation Decisions in Low-Income Rural Households." *Food policy,* May 1985.

Franklin, D.L. and M.W. Harrell. "Panama: Nutritional Functional Classification Study-Who and Where are the Poor." *Food Policy,* February 1985

Franklin, D.L., G. Appleby, A.G. Keeler, P.F. Mulligan, and M.W. Harrell. "A Case Study of Vegetable Production and Marketing in Western Guatemala." *Research Triangle Institute,* 1980.

Franklin, D.L. and I. Vial de Valdés. "La Demanda por Calorias en Hogares con Niños Desnutridos y el Papel del Tiempo de la Madre." *Cuadernos de Economia,* December 1979. Invited paper to Honor the Nobel Prize for Professor T.W. Schultz.

Holthausen, Duncan M. "Input Choices and Uncertain Demand". *American Economic Review,* March 1976, vol. 66, no. 1.

Hummels, David. "Have International Transportation Costs Declined?". *University of Chicago,* July 1999.

Janvry,Alain de and Elizabeth Sadoulet,. "Rural Poverty in Latin America: Determinants and Exit Paths". *Food Policy 25,* 2000.

Lopez, R and A. Valdés. "Fighting Rural Poverty in Latin America". *World Bank Working Papers,* 1998.

Schultz, T.W. "The Economics of Being Poor: Nobel Lecture (1979)". *Journal of Political Economy,* 1980, vol.88 no. 4.

Schultz, T. W. "The Value of the Ability to Deal with Desequilibria". *Journal of Economic Literature*, 1975, vol. 13.

Valdés, A. and D.L. Franklin. "Evaluation of Design Parameters in Cattle Production in the Colombia Llanos." *Economics and the Design of Small Farmer Technology*. Edited by Valdés, Scobie, and Dillon. Iowa State Press, 1979

ECONOMIC GOVERNANCE AND ITS IMPORTANCE FOR USAID/LAC'S WHITE PAPER ON RURAL PROSPERITY

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CONTENTS

I. BACKGROUND

This paper is a contribution to a Rural Prosperity White Paper being prepared by the Bureau for Latin America and the Caribbean (LAC) of the U.S. Agency for International Development (USAID). The White Paper seeks to provide "a framework with guidelines for reference in developing strategic approaches, programs, and activities to promote rural prosperity and reduce poverty in the LAC region and to guide [the] LAC Bureau as it links with the other parts of the Agency and its partners" (from the draft outline).

The White Paper responds in part to the new USAID Administrator's initiative to re-emphasize, after years of neglect by the international donor community, the significant potential of the agricultural sector for reducing poverty, hunger, and conflict. At the same time, it adopts a broad, rural-economy approach that considers non-farm as well as farm-based sources of livelihood. This comprehensive vision is appropriate, first, because the combined "food and agroindustrial system" generates close to four times the value of agriculture defined as farm-based production (Bathrick 2001:3, citing a study by the International Food Policy Research Institute [IFPRI]).[1] Second, other sectors, such as tourism and *maquila* (assembly) production, also offer significant potential for generating income and employment in the rural areas of many LAC countries. In some LAC countries, emigrants' remittances (as well as the oft-neglected internal, intrafamilial transfers from urban to rural areas) also contribute importantly to rural livelihoods; but these flows are not directly influenced by USAID strategies, programs, and activities.

Notwithstanding these important nonagricultural sources of rural incomes, the overall performance of the rural economy in most if not all of the LAC countries assisted by USAID will depend primarily on the health of the agricultural sector (de Janvry and Sadoulet 2001:10). Faster agricultural growth will generate increases in rural non-farm incomes and employment through effects that are both direct (backward and forward linkages) and indirect (generalized spending on goods and services by farm households). Many of these goods and services, including agricultural inputs and services, can be produced in rural areas, often by micro and small businesses.

The White Paper is based on a strategic approach centered on trade-led economic growth. Its four action areas are: (1) rules of trade and market access, (2) science and technology, (3) access to assets, and (4) vulnerability management. As a cross-cutting theme, improved economic governance is deemed necessary "to more fully integrate [the] poor and disadvantaged into [the] economy, reducing poverty and conflict and expanding democratic participation" (from the draft outline).

It is important to bear in mind that a strategic approach seeking to promote rural prosperity and reduce rural poverty must have a long-run focus. There are no quick fixes, especially since wealth redistribution offers much less hope for improving livelihoods

[1] A more recent paper by IFPRI's Director General (Pinstrup-Andersen and Babinard 2001:10) repeats this figure, but also notes that while agriculture accounts for 10% of LAC's GDP, agriculture plus agro-industry account for 25% (p. 2). The higher, 4:1 ratio presumably includes multiplier effects on other economic sectors

than wealth creation. Rapid economic growth, sustained over several decades, is the best way to achieve significant reductions in poverty; but growth policies need to be complemented by public and private actions to increase the assets of the rural poor.

The next section of this paper discusses several alternative definitions of the concept of economic governance. Subsequent sections focus on the interrelationships among economic governance, democracy, economic growth, poverty, and conflict; the linkages between economic governance and the action areas identified above; the respective roles of the public and private sectors in economic governance; appropriate and inappropriate interventions for improving economic governance; and program and operational linkages within USAID and between USAID and other development institutions.

II. THE CONCEPT OF ECONOMIC GOVERNANCE

Most economists have discovered "good governance" as a major determinant of economic growth only in the last 10-15 years. A few, like Nobel laureate Douglass North, had been stressing its importance well before then, even though their focus was more explicitly on "institutions." Governance may be defined succinctly as "the traditions and institutions that determine how authority is exercised in a particular country" (Kaufmann, Kraay, and Zoido-Lobatón 2000:10).

The term "economic governance" is of more recent vintage, and it remains a concept in search of a clear and widely accepted definition. A quick look at a number of papers on this topic available on the Internet (not including the many dealing with *international* economic governance) reveals that authors are reluctant to define the concept and tend to concentrate on narrow aspects of economic governance (e.g. property rights, contracts, regulatory functions, corruption, fiscal management, or overall macroeconomic policy). Much of the economics literature is highly theoretical and mathematical, as exemplified by a recent paper by Dixit (2001), who, helpfully or not, tells us that "almost all economic transactions need governance" (p. 2).

USAID/LAC's recent paper on "Rethinking the Rural Economy in LAC" (USAID 2001:5, footnote 1) defines economic governance as:

> the enabling environment within which the economy functions[; it] implies the need to ensure stable, transparent and predictable rules and regulations that encourage competition and equitable access to public services. Economic governance is achieved through a country's public *and* private sector institutions that exert a determining or guiding influence in or over how individuals, enterprises, and/or countries carry out economic transactions.

The LAC paper also characterizes economic governance as "the essential governance functions that facilitate trade and that expand participation in markets" (p. 5).

The LAC definition, which can be considered to fall within the Northian tradition, highlights the key characteristics of stability, transparency, and predictability, and importantly encompasses private as well as public institutions. Its perspective is primarily microeconomic, although a macroeconomic dimension is implicit in the consideration of "how . . . countries carry out economic transactions," and USAID/LAC has made clear that its intention was indeed to cover macroeconomic as well as microeconomic policies.

Another definition of economic governance, presented by an advisor to USAID/LAC, considers it as a "concept . . . [that] refers to those parts of a country's public sector and private sector institutional infrastructure that exert a determining or guiding influence in or over how individuals, enterprises (businesses), and/or countries carry out economic (broadly) and commercial (narrowly) transactions" (Byrnes 2001:38). For the public sector, the "institutional infrastructure" is said to comprise (1) **policies** (including laws and regulations) that influence economic, financial, and commercial transactions; (2) the **organizations** through which policies are implemented; and (3) the **tools** (procedures, practices, and technologies) used to formulate, implement, and evaluate policies. Again the focus is primarily on microeconomic policies, with macroeconomic policies included as well by implication.

Byrnes identifies the private-sector dimensions of economic governance as voluntary industry agreements to set standards (e.g. for environmental certification). This definition could be expanded to cover other private-sector actions, including efforts to improve workers' capacities; the establishment of non-governmental organizations (NGOs) to promote microenterprise development; and joint activities with the public sector to promote and stimulate tourism, commodity exports and foreign investment.

This paper argues that a more comprehensive concept of economic governance should guide strategic thinking about rural prosperity. Macroeconomic policy, for example, deserves more explicit attention for two basic reasons:[2]

* Numerous quantitative studies have produced widespread agreement that economic growth, for which sound macroeconomic policy is crucial, is the most important means for reducing poverty over the long run (see, e.g. Dollar and Kraay 2001 and World Bank 2001, and the references therein).

* Incentives for agricultural production, the growth of which is crucial for reducing overall rural poverty, are affected more by macroeconomic policies (especially exchange-rate and trade policies) than by direct policies specifically affecting the agricultural sector (Krueger, Schiff, and Valdés 1988).

In addition, the concept of economic governance should give more emphasis to the regulatory functions of government, particularly in the financial sector and in situations of market failure (e.g. those that result in environmental damage) and of market-size

[2] Since the case for macroeconomic policy reform is well known, the White Paper does not need to include a detailed discussion of specific macroeconomic-policy interventions

limitations that preclude the establishment of a sufficient number of firms to ensure competitive behavior.

Another important area of economic governance comprises public- and private-sector actions to reduce corrupt practices and other types of criminal activity against persons or property, all of which add to business costs--thus reducing competitiveness--and deter new investment.

Yet another area of economic governance consists of policies that determine the allocation of expenditures on physical infrastructure (especially roads, electric power, and irrigation) and services such as agricultural research and extension. Decisions in these areas have important effects of how broad-based the process of rural development will be.

Finally, the concept of economic governance should also encompass public-sector social policy, as well as private-sector actions to promote social development. Particularly relevant are activities that have a direct bearing on the formation of human capital--a key asset needed by the rural poor to escape from poverty. Public and private programs in education, workforce training, health, and nutrition are especially important in this respect.

This paper will not discuss specific macroeconomic policies, mainly because of time and space considerations and also because these policy areas have received a great deal of attention elsewhere. However, the other aspects of economic governance discussed above will be addressed briefly, although no attempt will be made to provide a concise, alternative definition of economic governance.

III. INTERRELATIONSHIPS AMONG ECONOMIC GOVERNANCE, DEMOCRACY, ECONOMIC GROWTH, POVERTY, AND CONFLICT

The interrelationships among economic and political variables in the process of development are complex and not subject to neat generalizations. The voluminous literature on the relationship between economic growth and democracy has produced ambiguous results--partly, one would guess, because democracy is often defined in too simple a fashion that does not allow for gradations of achievement in the various dimensions of democratic development. Likewise, strong economic growth is no guarantee that conflict will be avoided, as is clear from the examples of Iran and several Central American countries in the 1960s and 1970s.

Although the adoption of political democracy, especially in the narrow sense of electoral processes, does not automatically produce faster economic growth, a quantitative analysis of eight Latin American countries concludes, encouragingly and somewhat contrary to popular belief, that "competitive elections have enhanced, rather than undermined, the capacity of political leaders to address outstanding problems of macroeconomic management" (Remmer 1993:393).

While the relationship between economic governance (broadly defined to include macroeconomic policy) and economic performance seems to be strong (Kaufmann, Kraay, and Zoido-Lobatón 2000), that between one key element of economic governance--openness to trade--and economic growth is less clear. Even distinguished economists who are strongly in favor of trade liberalization (e.g. Jadgish Bhagwati and T.N. Srinivasan) have criticized the methodology of econometric studies purporting to show that greater openness accelerates GDP growth (The Economist 2001:10-11). Still, they would agree that much noneconometric evidence strongly suggests that trade is good for economic growth.

If economic growth is a (or the) major factor contributing to poverty reduction, as is widely accepted, and if economic growth is positively correlated with the quality of economic governance, as likewise seems clear, it follows that good economic governance does more to reduce poverty than poor economic governance.

The relationships between economic growth and poverty reduction, while strong, are nevertheless not as close as one might imagine. For example, poverty reduction for a given long-term growth rate of per capita GDP seems to be less in countries with highly unequal distributions of income (such as most Latin American countries) than in those where inequality is less (de Janvry and Sadoulet 2001:7; Wodon 2000:41). Similarly, a study prepared for USAID in 1997 by Peter Timmer found that agricultural growth was pro-poor in countries where income equality was modest, but not in countries with highly unequal income distributions.

For this reason, elements of economic governance not related to macroeconomic policy, or to the provision of general incentives to private investors, assume particular importance. For example, economic governance needs to focus on improving the access of the poor to assets (factors of production), markets, and information. Perhaps the most important of the assets is human capital, which is why the concept of economic governance needs to include social policy. Birdsall, Ross, and Sabot (1995) provide an insightful analysis, in the East Asian context, of the mutually reinforcing relationships among economic growth, education, poverty reduction, and narrower income disparities.

This section concludes by presenting a half-dozen illustrative examples of economic-governance actions in another area--the broad realm of participatory democracy—that also have the potential to strengthen economic-growth performance (Zuvekas 2000:60-61). These actions are:

* enacting legal reforms and ensuring an improved administration of justice, which strengthen property rights, lower the costs of dispute settlement, and reduce the likelihood of arbitrary applications of the law;

* undertaking measures to reduce criminal activity, which causes businesses to make significant investments in security systems and services and to raise risk premiums required as part of profit margins;

* decentralizing some government programs, ideally by transferring financial as well as administrative authority;

* providing greater scope for non-governmental organizations (NGOs) to administer social-service and environmental programs, and for other civil-society groups to play watchdog roles;

* making more rapid movement toward both legal and especially de facto equality of opportunity for women and minority groups; and

* permitting greater freedom of association, to allow various groups a reasonably equal opportunity to negotiate for economic, social, and cultural objectives in the political arena and the workplace.

Note that a number of these actions imply shared responsibility between the public and private sectors, a topic that will be examined in more detail in Section V below.

IV. INTERRELATIONSHIPS WITH WHITE-PAPER ACTION AREAS

The quality of economic governance affects the four action areas of the White Paper in many ways, both directly and indirectly, mainly through decisions that influence the allocation of public expenditures. This section provides some illustrative examples of these interrelationships. The basic message is that good economic governance requires a major reallocation of public expenditures, both between and within sectors, to target poor rural households more directly and effectively.

A. Rules of Trade and Market Access

Activities affecting the rules of trade, such as those related to the Free Trade Area of the Americas (FTAA), financial regulation, and contracts enforcement, will need to be pursued with a conscious identification of their impact on different groups of poor people. For example, if agricultural liberalization under the FTAA is likely to affect some poor farmers adversely, as was the case in Mexico after the North American Free Trade Agreement (NAFTA) came into effect, then assistance programs for the affected groups need to be designed in advance so that they can effectively mitigate these effects through programs of compensation (poverty alleviation) and, more importantly, programs that assist poor rural households to develop alternative, more permanent, and better sources of income (poverty reduction). In the area of financial regulation, actions to bring rural microfinance institutions into the regulatory framework are especially important for creating self-sustaining financial institutions with a strong capacity for expansion. With respect to contracts enforcement, the very long time frame required for effective judicial reform in most countries means that opportunities for utilizing alternative dispute-settlement mechanisms should be explored.

More equitable access by the rural poor to markets, both domestic and external, will depend to a large extent on the construction or improvement to all-weather standards of farm-to-market roads in poor areas. The executive and legislative branches of government must make conscious decisions to target investments in rural roads to geographic areas where the incidence of poverty is high. At the same time, the scarcity of available resources means that not all poor areas can receive such investments. Other things being equal, priority should be given to poor areas with the greatest agricultural potential.

Access to markets can also be facilitated by providing better market information to poor farmers, whose lack of education and geographic isolation make it difficult for them to keep up-to-date on price and other conditions in the markets for the commodities they produce. Good economic governance requires assistance to help level the playing field through radio programs and other media channels that convey current market information to poor households in ways that can be easily absorbed. Providing more sophisticated information to the rural poor on external markets (especially on standards, certification systems, and requirements for niche markets) will require working through NGOs and private enterprises.

B. Science and Technology

Many of the potential benefits to poor rural households of advances in science and technology require basic literacy and numeracy for their application to be effective. Investments in basic, secondary, technical, and adult education in poor rural areas thus facilitate the adoption by poor farmers of more efficient farming techniques and technologies and improve the access by members of poor rural households to off-farm jobs paying higher wages. Targeted investments in rural electrification and irrigation also increase the ability of poor rural households to benefit from advances in science and technology. Improved access to credit by poor rural households--a shared responsibility of the public and private sector--will make it easier for these households to purchase modern agricultural inputs, including those that are becoming available through advances in biotechnology. Greater investments in research on crops of particular importance to the poor, and extension services better targeted to poor farmers, are other ways to reorient public expenditures toward poverty reduction.

C. Access to Assets

The asset of the rural poor with the greatest potential for bringing them out of poverty--their own human capital--has already been discussed in several different contexts. The need for improved access to credit has also been mentioned, as has access to infrastructure assets such as roads, electric power, and irrigation systems.

Another important asset, obvious in the rural context, is land. While the potential of land redistribution to lift rural households out of poverty is limited by the simple arithmetic of available land and the numbers of poor farm households, and education and training is a far more promising route for rural poverty reduction (de Janvry and Sadoulet 2001:4), the potential stronger rural land markets for reducing poverty should not be overlooked. Good governance requires that investments be made to strengthen cadastre and land-registry systems, and to provide more equitable judicial mechanisms for dispute resolution, especially through alternative dispute-resolution systems. Providing secure land titles can improve poor farmers' access to formal credit, although the literature suggests that the relationship between secure land titles and access to formal credit is not as close as might be thought. However, recent studies of land-titling programs in Honduras and Paraguay found positive impacts on investment demand, credit supply, and the income levels of farm households (Wodon 2000:64).

D. Vulnerability Management

The income levels and living standards of the rural poor are highly vulnerable to normal annual climatic variations, natural disasters, and wide fluctuations in the prices of commodities produced for local and external markets. This vulnerability is exacerbated by the vicious circle between rural poverty and environmental deterioration, whose effects were evident in the pattern of damages and destruction caused by Hurricane Mitch in Central America in 1998.

Good economic governance in the face of this situation requires a coherent national strategy for disaster prevention and mitigation, as well as the establishment of an appropriate legal and institutional framework for implementing the strategy. Such a framework should be based on strong institutions at the local level that ensure widespread participation, including that of poor people, and close cooperation between the public and private sectors.

With respect to price fluctuations and other types of economic vulnerability, policy-makers need to keep in mind that agricultural productivity increases and an eventual liberalization of world trade in agriculture will accelerate the "push" of poor people in LAC countries out of farming activities. Sound macroeconomic and microeconomic policies are thus necessary to stimulate investment and job creation in non-agricultural activities and to prevent rural poverty from simply being converted into urban poverty.

V. ROLES OF THE PUBLIC AND PRIVATE SECTORS

A. Macroeconomic Policies

The broad definition of economic governance adopted in this paper implies a strong role for government in a variety of areas. One of these is the maintenance of sound macroeconomic policies. Although this paper will not enter into a discussion of specific

policy instruments in this area, it is worth recalling that sound macroeconomic policies must be maintained reasonably consistently for at least three or four consecutive years in order to provide investors a reasonable degree of confidence that sound management of the economy by public-sector institutions will be sustained.

It is also important to bear in mind that assuring equitable access by the poor to productive assets will require adequate fiscal revenues. In the context of the need to maintain fiscal discipline, these fiscal requirements generally will have to be met not only by reallocating public expenditures but also by improving tax administration and/or raising tax rates. If tax-rate increases are deemed necessary, they should be applied to taxes that do not discourage private investment.

B. Other Public-Sector Actions

Many important economic-governance actions have already been discussed in the previous sections of this paper. This section provides a brief summary of these and other actions, as time and space considerations do not permit an extended discussion. These actions are grouped into four broad categories: (1) stimulating private investment, (2) promoting competitive behavior and protecting consumers, (3) providing equitable access to public services, and (4) strengthening social policy.

1. Stimulating Private Investment

* Reducing the costs and time required for establishing businesses. The high costs to society of onerous business-registration requirements have been clearly demonstrated by research carried out by Hernando de Soto and his colleagues in Peru and other countries.

* Providing adequate protection of physical and intellectual property rights, through legal reforms and stronger, more equitable application of laws and regulations by a reformed judicial system. These reforms include measures to improve land-tenure security.

* Preserving the integrity of the financial system through vigorous application of international (Basle) standards of financial regulation. Aggressive and risky behavior by financial institutions can encourage business investment in the short and medium run; but over the long run a weak financial system will have negative effects on investment and economic growth, as demonstrated clearly by events in East Asia over the last five years. Even Japan, a highly developed country, has seen its economic growth halted for a decade or so by a weak financial system.

* Providing a legal framework to facilitate formal savings (and therefore investment) by poor people, e.g. by permitting microfinance institutions, cooperatives, and other such entities to mobilize savings and by bringing them within the purview of the regulatory authorities.

* Establishing and providing highly trained and motivated staff for "one-stop windows" for potential foreign investors, permitting them to complete at a single location all paperwork requirements for establishing local business operations.

* Establishing or strengthening laws and regulations that permit the privatization of public services such as telecommunications, electricity, ports, airports, roads, and water systems. Privatization is not a panacea for improving efficiency and service quality, but in the great majority of cases private entities have had a better track record than their public counterparts. In addition, many LAC governments are heavily indebted, making it difficult if not impossible for them to borrow the large sums needed to finance expansions and improvements in key services. Since many of these services cannot be provided in competitive markets, due to conditions of natural monopoly or small market size, the privatized services will need to be carefully regulated to prevent the exercise of monopoly power.

* Establishing an independent, impartial judicial system to give investors confidence that business disputes can be resolved in a fair manner, without large expenditures of time and money, including the payment of bribes. Since reform of civil and commercial law requires major cultural change in most LAC countries, it will be a long process. In the interim, opportunities to establish alternative dispute-resolution mechanisms should be explored.

* Implementing measures to improve the security of persons and property. An increase in crimes against persons and property will raise costs to businesses (e.g. more security personnel and security infrastructure; ransom payments, insurance payments) and deter investors. More effective police forces are needed to punish criminals and deter crime; but even more important are preventive measures, including better educational and employment opportunities for young people. While criminal-justice reforms can be regarded as being (almost) exclusively within the realm of democratic governance, preventive measures should be considered as the joint responsibility of policy-makers concerned with both democratic and economic governance.

2. Promoting Competitive Behavior and Protecting Consumers

* Requiring transparency in business and financial operations, e.g. through stronger and more timely public-disclosure requirements for corporations and financial institutions.

* Approving and implementing anti-monopoly legislation.

* Strengthening the regulation of natural monopolies.

* Enacting and enforcing consumer-protection legislation, including the establishment of grades and standards as well as labeling requirements for foods and medicines.

* Enacting and enforcing anti-corruption legislation, including strict legal requirements for government procurement.

3. Providing Equitable Access to Public Services

* Building or improving farm-to-market roads in areas with a high incidence of poverty but also with good agricultural potential.

* Extending rural electrification to more communities, thus increasing opportunities for agricultural production (e.g. through irrigation pumps), agricultural processing, and the provision of a variety of non-agricultural goods and services that can be produced in rural areas.

* Constructing irrigation systems that can be managed and maintained sustainably by local water-users' associations.

* Reorienting agricultural-research priorities to focus more on commodities produced by poor farmers.

* Targeting agricultural-extension services to focus on small-farmers and small-farmer cooperatives.

4. Strengthening Social Policies

* Increasing the availability and improving the quality of basic and secondary education, technical training, and adult education, so that rural residents can acquire the human capital they need to escape poverty.

* Adopting long-run strategies to provide access by all rural residents to a minimum package of basic health services. Better health status strengthens human capital by improving school attendance and performance and by making workers more productive.

* Improving the targeting of social-safety-net programs that seek to provide better nutrition, and improving incentive mechanisms linking food assistance to school attendance and use of health services.

* Accelerating the provision of potable-water and sanitation systems to poor communities lacking these services.

* Enacting and enforcing legislation that provides equality of opportunity for women, minority groups, persons with disabilities, and other groups whose opportunities have been limited by discriminatory practices.

C. Private-Sector Economic Governance

The term "governance" may at times seem awkward when applied to the private sector, but it is useful for focusing on proactive measures that businesses, NGOs, cooperatives and other groups can take to stimulate investment and employment, strengthen competitive behavior, and improve access to productive assets. These measures may be undertaken entirely within the private sector, but often they are most effective when done in cooperation with public-sector entities. Examples, some of which have already been mentioned, include:

* Establishing, through private initiative, industry-wide grades and standards, including standards for health and environmental certification, as well as codes of behavior governing labor relations and business ethics.

* Establishing on-the-job training programs that increase the human capital of the poor and enable businesses to raise wages in accordance with increased productivity.

* Establishing or supporting NGOs that promote sustainable microfinance institutions as well as various educational, health, and cultural and other programs that strengthen human capital.

* Improving opportunities for small farmers through contract-farming arrangements that provide guaranteed markets for crops meeting quality standards, technical assistance to help meet these standards, and credit to finance production.

* Utilizing private-sector extension services to transfer technology to small farmers.

* Seeking collaborative arrangements under which microenterprises can provide materials and services to medium- and large-scale businesses, and rural households can produce items (e.g. apparel) at home under the old "putting-out" system.

* Establishing joint public-private mechanisms to promote and stimulate tourism, commodity exports, and foreign investment. Tourism can be an especially important generator of rural employment and incomes in countries with significant ecotourism potential.

* Creating technically sound (not politicized) "social auditing" mechanisms to monitor the effectiveness, efficiency, and integrity of government operations.

* Devising strategies and programs, jointly with public-sector entities, to reduce criminal activity that raises business costs and deters investment, especially in specific locations such as industrial parks devoted to *maquila* production or major tourism areas.

* Strengthening small-farmer cooperatives (e.g. through assistance by NGOs) to increase these producers' bargaining power in the marketing of agricultural products.

VI. APPROPRIATE AND INAPPROPRIATE INTERVENTIONS

Experience in the LAC region and other developing countries has made clear what kinds of economic-governance interventions tend to be effective in sustainably improving rural prosperity. Other interventions have been shown to be clearly ineffective, although some of these continue to be funded or proposed. In most if not all cases, the appropriate interventions will be most effective when economic-governance decisions are made jointly by governments and representatives of private enterprise, NGOs, and other civil-society groups.

A. Appropriate Interventions

Apart from sound macroeconomic policies and other measures to stimulate overall GDP growth, recent experience in a number of LAC countries suggests that the following strategies and mechanisms, among others, have been effective ways to improve economic governance in rural areas, and can be replicated elsewhere in the LAC region:

* **Education**, ideally through the secondary level, and **on-the-job-training**. Investments in basic and secondary education are probably the most important measures for enabling the rural poor to escape poverty over the long run. Good economic governance requires that tough decisions be made not only to increase funding for education and training but also to improve their quality. Quantitative analysis of Mexico by de Janvry and Sadoulet (2001:4,6) finds that human-capital variables are the most important set of factors explaining rural inequality. Education will prepare new workers mainly for higher-paying nonagricultural activities; but in Northeast Brazil, Ecuador, and Guatemala, literate farm workers and agroindustrial employees had significant wage increases following on-the-job training programs (Damiani 2000:8). Consultations between governments and other sectors of society are important for ensuring that the content and quality of education are responsive to the changing requirements of the marketplace. On-the-job training programs involve the private sector by definition; but they should also be an important component of governments' strategic planning for technical education, since they are often more cost-effective than school-based programs.

* **Market-driven systems approaches** to agricultural production and related activities that stress integration with the entire marketing chain. The FINTRAC/CDA program in Honduras has increased incomes and employment in rural areas, decreased post-harvest losses, and increased farmer purchases from microenterprises (FINTRAC 2001a and 2001b). The PRA project in Peru has produced similar results (Chemonics

2001). The long-run success of such programs will require the sustained availability of high-quality, specialized technical assistance in marketing for a number of years; but the payoffs of having the right people for these activities are high. While these interventions might appear to fall within the realm of private-sector economic governance, their effectiveness will depend to a large degree on the quality of supportive public-sector actions, including education and training and a number of the other interventions discussed below.

* **Secondary cities** as a focus for integrating farm-level and non-farm economic activities. In Honduras and Peru, enterprise development has been successfully stimulated through business service centers in selected cities. Again, this is an area where close cooperation between the public and private sectors is needed to improve investment climates at the local level. Greater opportunities for the exercise of local initiative should stimulate competition among regions, reduce an unhealthy dependence on central-government actions, and contribute positively to economic growth.[3] However, unless local governments have significant fiscal autonomy--most now depend too much on transfers from the central government--there are limits on how successful the secondary-cities model can be.

* **Cooperative efforts between the public and private sectors to promote, and jointly solve problems related to, agricultural, agro-industrial and other exports from rural areas**. Such efforts have benefited small farmers in Northeast Brazil, Ecuador, and Guatemala (Damiani 2000). Government decision-making in this area will be more effective when it is better targeted to overcoming specific obstacles identified by the private sector. Perhaps the classic example of the great potential of this model is South Korea in the 1960s. The Korean experience, however, is not easily transferable to LAC countries, where the political context is very different.

* **Contract-farming arrangements**, which have benefited small farmers in Guatemala, Honduras, and other LAC countries. While these arrangements have not always been sustained, the successful models suggest that contract farming is often a more efficient way of transferring technology to small farmers than traditional public-sector extension services. The fact that new crops and technologies associated with these programs have had spread effects to participant farmers' neighbors would seem to indicate that these contractual arrangements can have lasting benefits even if they are terminated because of changing market conditions, the high costs of supervising large numbers of small contracts, small-farmer problems in meeting quality standards, or other

[3] The secondary-cities focus differs somewhat from the more ambitious regional-development focus proposed by de Janvry and Sadoulet (2001:11-12), which involves more formal, comprehensive planning activities whose effectiveness might be choked by administrative complexities. Nevertheless, their call for comprehensive regional development frameworks, with explicit poverty-reduction strategies and public-investment programs designed as magnets for attracting private investors, is appropriate for regions where planning and administrative skills are adequate and local political and business leaders are open to broad-based models of development. Elsewhere, the more limited secondary-cities focus would appear to be a better option, although its evolution into a regional-development focus is a worthy long-term goal.

factors.[4] Damiani (2000:7) suggests that governments might make contract farming more attractive by improving the legal framework and providing credit to small farmers.

* **Social investment funds**, established in most Latin American countries during the 1990s. These funds, which receive significant funding from external donors, generally have been more effective mechanisms for implementing small infrastructure projects--especially schools, health facilities, and water and sanitation systems--than the respective line ministries or government agencies traditionally responsible for these investments. Quantitative evidence from Honduras suggests that consultation with the rural poor prior to implementation increases the probability of their participation in projects; and their participation in the implementation process increases the probability that they will use the facilities once they are completed (Wodon 2000:118-122). Nevertheless, a long-term concern with these funds is that they can provide governments excuses to delay reforming their line ministries and autonomous agencies.

* **Investments in physical infrastructure** (electric power, irrigation, roads), which were deemed crucial to the success of NTAE programs in Northeast Brazil, Ecuador, and Guatemala (Damiani 2000:4). In Mexico, de Janvry and Sadoulet (2001:8) find that "ejidos connected by paved roads have a lower incidence of poverty. In the Progresa communities, village infrastructure (communities connected by federal or state roads) reduces the incidence of poverty." Good governance within a framework of broad-based economic growth and poverty reduction calls for more effective targeting of public infrastructure investments to poor communities. But since resources are scarce, priority should be given to communities with the greatest agricultural and other economic potential.

* **Decentralization of public services to local governments, combined with greater participation by the rural poor in decision-making**. Decentralization has had positive effects on poverty reduction in Bolivia and Mexico (de Janvry and Sadoulet 2001:12). However, when decentralization is undertaken without adequate training for local governments and the NGOs working with them, failure has been common (de Janvry and Sadoulet 2001:12; Echeverría 1998:28).

* **Microfinance programs** operating on sound banking principles and subject to review by national regulatory authorities (e.g. BancoSol in Bolivia). Programs of this nature can be effective mechanisms for mobilizing the savings of the rural poor and financing their investments in productive activities. Many LAC countries need legal reforms to permit microfinance programs to develop along these lines. At the same time, the importance of microenterprises in the development process needs to be demythologized. Microenterprises are more appropriately viewed as cabooses rather than engines of development. In other words, their overall growth will depend mainly on the performance of the macroeconomy.

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[4] For a brief discussion of the mixed experience of contract farming in Latin American countries, see Carter el al (1995:11-13) and Damiani (2000:5-7)

* **Provision of environmental services** (e.g. soil and water conservation, preservation of biodiversity, forest protection), for which rural residents would receive fees (e.g. carbon sequestration payments). Limited experience with these new activities suggests that they may be important future sources of income for the rural poor. NGOs can play a major role in arranging such services and helping rural communities implement them. But governments, too, have an important role to play by establishing appropriate legal and institutional frameworks.

B. Inappropriate Interventions

* **Integrated rural development programs**. These programs generally have been high-cost and have been bogged down by complex administrative structures involving large numbers of government agencies, all concerned with turf-protection issues. Strategically, the same goals can be met better through **coordinated** public-sector interventions in targeted rural areas where the incidence of poverty is high. This coordination can be done without creating and staffing a formal institution; but it should include participation by the rural poor in the planning, implementation, and monitoring of programs.

* **Subsidized credit**. Farmers of all sizes will always want subsidized credit, and some NGOs are still wedded to these programs. But the record is clear that they are both financially unsustainable and not successful in producing sustained benefits for small farmers. Many public-sector agricultural development banks (most now mercifully closed or substantially scaled down) also provided most of their funds to medium- and large-scale farmers and farm-related businesses. Lack of access to formal credit (due partly to lack of secure land titles) is more of a problem for small farmers than market interest rates.

* **Fiscal incentives for investments in rural areas**. These programs, to the extent that they indeed lure businesses to rural areas, result in misallocations of productive resources and deprive the government of needed fiscal revenues. Often, however, they have had few takers. A much better strategy for attracting businesses to rural areas is to improve the availability and reliability of infrastructure (electricity, water, roads, etc.) and the quality of human resources.

* **Price and marketing controls**. Price and marketing controls, now largely abandoned in most LAC countries, discourage production while encouraging hoarding and contraband activities, especially along the borders with other countries. Often applied to basic grains, price controls penalized the very poorest groups in society (small farmers) while benefiting the better-off urban poor as well as urban middle- and upper-income groups.

* **Government housing programs**. Public investments in housing are one of the least productive activities undertaken by governments. They can eat up enormous sums of money that would be much better spent on programs in education, health, and

nutrition. They have been subject to significant amounts of corruption, and most of the beneficiaries have been middle-class households and those close to middle-class status. If any public monies are to be spent in this area, they should be for small home-improvement loans, carefully targeted to low-income households. Medium- to long-term loans could be dollarized to keep real (market) interest rates relatively low, although borrowers would have to bear exchange-rate risks.

* **Traditional public-works programs**. These "workfare" programs, used in some LAC countries during periods of recession, have been relatively expensive, costing $3 or more to provide $1 in income to beneficiaries (Wodon 2000:94-97). Moreover, some of them are not well targeted.

VII. PROGRAM AND OPERATIONAL LINKAGES

The broad concept of economic governance adopted in this paper makes clear that the creation of rural prosperity and reduction of rural poverty requires much more than the traditional tools of macroeconomic and microeconomic policy. Reliable policies in these areas are necessary to stimulate investment, but private investors also need an improved judicial system, relatively free of corruption and arbitrary applications of the law; security of persons and property; a well-educated and -trained labor force; and reliable infrastructure.

A. Within USAID

The economic aspects of USAID/LAC's rural-prosperity activities should be closely coordinated with activities in a variety of other areas, including democratic development, the administration of justice, education, health, environmental protection, and disaster prevention and mitigation. The previous sections have made clear that these are all essential elements of good economic governance. Examples of such coordination include:

* Joint programming of economic-policy and economic-growth activities with those in the areas of education and training, to ensure that the latter provide the cognitive, technical, managerial, and administrative skills that LAC countries need to become more competitive in external markets;

* Joint programming of tax-reform measures that seek to strengthen fiscal management and stimulate private investment, and DG (democracy and governance) activities that seek to reduce corruption and tax evasion;

* Joint programming of activities to stimulate economic growth of secondary cities and their hinterlands, and DG activities that seek to strengthen municipal governments; and

* Joint programming of job-training programs and DG activities in the area of crime prevention, to provide productive employment opportunities to young people at risk of engaging in criminal behavior.

At a broader level of USAID (and overall USG) programming, linkages will need to be developed between LAC's rural prosperity strategy and activities such as:

* USAID's new worldwide agricultural strategy, being developed by G/EGAD;

* The Andean Regional Program;

* The proposed Partnership for Prosperity for Mexico and Central America, which gives major emphasis to both agriculture and trade facilitation, and which USAID expects to implement in late FY2002 or early FY2003; and

* The Free Trade Area of the Americas (FTAA).

B. FTAA

Much of the agricultural potential of the LAC region lies in the production of nontraditional agricultural exports (NTAEs) for the U.S., European, and other markets. Many NTAEs can be produced efficiently by small farmers, especially those who are functionally literate, and new NTAE production on large farms will create many jobs for farm workers. Additional employment will be created in processing and packaging plants, input-supply and marketing operations, and the provision of a variety of services. LAC countries thus have considerable interest in the outcome of FTAA negotiations on liberalization of agricultural trade.

While USAID obviously cannot become an advocate for the LAC countries with respect to trade negotiations on specific commodities, it should continue to assist LAC countries in their general preparations for the FTAA, as liberalized trade will benefit the United States as well as the rest of the hemisphere. Apart from continuing support for regional trade-capacity-building programs in Central America (PROALCA) and the Caribbean, USAID might consider a similar program for the Andean region.

Assistance to the LAC countries in preparing for the FTAA will have the indirect benefit of strengthening their participation in the new round of trade negotiations launched, however tentatively, at the meetings of the World Trade Organization (WTO) in Doha, Qatar in November 2001.

C. Other Donors and External Organizations

The international financial institutions, particularly the World Bank and the Inter-American Development Bank (IDB), can complement the USAID/LAC rural prosperity strategy by increasing their lending for rural infrastructure, especially roads, electric power, and irrigation systems, projects that USAID generally finds too large to finance in the LAC region. They can also continue to support modernization-of-the-state and other structural-reform activities. Donor governments and NGOs can complement USAID activities through programs to strengthen local governments and civil-society organizations, promote democratic development, protect the environment, and improve human-capital assets.

D. Plan Puebla-Panamá

USAID/LAC's rural prosperity strategy will also need to be coordinated with the Plan Puebla-Panamá, an initiative of Mexico's president, Vicente Fox, which encompasses the poor, southern states of his own country and the countries of the Central American isthmus.

REFERENCES

Bathrick, David D. "Forging a Revitalized Rural Sector from Globalization: Gearing Up for Trade-Driven Growth." A presentation for the 37th Annual Meeting of the Association for International Agricultural Development, Washington, DC, June 4, 2001.

Birdsall, Nancy; Ross, David; and Sabot, Richard. "Inequality and Growth Reconsidered: Lessons from East Asia." *World Bank Economic Review* 9, No. 3 (September 1995):477-508.

Byrnes, Kerry J. "Annex 3: A Background Paper on Defining Governance, Economic Governance, and Competitiveness." Prepared for USAID/LAC. [Washington, DC, 2001.]

Chemonics International Inc. Perú Office. PRA Project Institutional Contractor. "PRA Project: An Entrepreneurial Approach to Development--Results 2000 and Perspectives 2001." [Lima], June 2001.

Carter, Michael R.; Barham, Bradford B.; Mesbah, Dina; and Stanley, Denise. "Agro-Exports and the Rural Resource Poor in Latin America: Policy Options for Achieving Broadly Based Growth." LTC Research Paper 125. Madison: Land Tenure Center, University of Wisconsin--Madison, December 1995.

Damiani, Octavio. "The State and Nontraditional Agricultural Exports in Latin America: Results and Lessons of Three Case Studies." Paper prepared for the Conference on Development of the Rural Economy and Poverty Reduction in Latin America and the Caribbean, New Orleans, LA, March 24, 2000.

de Janvry, Alain and Sadoulet, Elisabeth. "Concepts for an Approach to Rural Development in Mexico and Central America: Regional Development and Economic Inclusion." Paper prepared for the IDB Regional Workshop, "Desarrollando la economía rural de Puebla a Panamá," Guatemala City, March 5-7, 2001.

Dixit, Avinash. "On Modes of Economic Governance." Revised (September 2, 2001) version of a paper serving as the basis for the author's Presidential Address to the Summer 2001 regional meetings of the Econometric Society. Web: http://www.princeton.edu/~dixitak/home.

Dollar, David and Kraay, Aart. "Growth Is Good for the Poor." Policy Research Working Paper 2587. Washington, DC: World Bank, April 2001.

Echeverría, Ruben G. "Strategic Elements for the Reduction of Rural Poverty in Latin America and the Caribbean." Policy Research Paper No. ENV-112. Washington, DC: Inter-American Development Bank, Sustainable Development Department, Environment Division, July 1998.

The Economist. "Globalisation and Its Critics: A Survey of Globalisation." [Special Survey.] *The Economist* (September 29, 2001). Pp. 1-32.

FINTRAC. "Agribusiness Linkages to Micro Enterprise: The Honduras CDA Example." Printed version of power-point presentation, [2001]. [2001a]

_____. "FINTRAC/CDA Business-to-Business and Microenterprise Linkages: Case Studies of Three Large Exporters/Processors." Unpublished paper, October 2001. [2001b]

Kaufmann, Daniel; Kraay, Aart; and Zoido-Lobatón, Pablo. "Governance Matters: From Measurement to Action." *Finance & Development* 37, No. 2 (June 2000):10-13.

Krueger, Anne O.; Schiff, Maurice; and Valdés, Alberto. "Agricultural Incentives in Developing Countries: Measuring the Effect of Sectoral and Economywide Policies." *World Bank Economic Review* 2, No. 3 (September 1998):255-271.

Pinstrup-Andersen, Per and Babinard, Julie. "Food, Agriculture, and the Environment in Latin America: Looking to the Future." Paper prepared for the dialogue on "The Summit Mandate: From Vision to Action—Agriculture Management and Rural Development," Woodrow Wilson Center, Washington, DC, May 7, 2001.

Remmer, Karen. "The Political Economy of Elections in Latin America." *American Political Science Review* 87, No. 2 (June 1993):393-407.

United States Agency for International Development [USAID]. Bureau for Latin America and the Caribbean [LAC]. "Rethinking the Rural Economy in LAC." Unpublished paper, [2001].

Wodon, Quentin T. et al. *Poverty and Policy in Latin America and the Caribbean*. World Bank Technical Paper No. 467. Washington, DC: World Bank, 2000.

World Bank. *World Development Report 2000/2001: Attacking Poverty*. New York: Oxford University Press for the World Bank, 2001.

Zuvekas, Clarence, Jr. "The Dynamics of Sectoral Growth in Central America: Recent Trends and Prospects for 2020." Central America 2020 Working Paper #2. Hamburg: Institut für Iberoamerika-Kunde, 2000. Pp. 81.

Annex VI

Rural Prosperity White Paper: *Background*
By Clemence J. Weber
January 16, 2002

A. Overview

The Western Hemisphere is at a juncture where the compatibility between trade and aid is high. Yet, there is a real risk of reversal of macroeconomic and democratic reforms. Many countries of the region still have serious stability issues that tend to emanate from rural areas (e.g., Colombia, Nicaragua, and Guatemala). That this issue is of special concern to the United States was demonstrated by the wave of migration that took place after Hurricane Mitch as well as threats to U.S. interests where civil wars have occurred. With the recent formation of a multi-agency working group on LAC rural economic development, it is an opportune time to think anew about ways to revitalize rural economies in the region. An emerging consensus is that *enhancing rural livelihoods is a way to unleash inclusive growth in the LAC region*. Otherwise, the rural sector, with its low productivity and high incidence of poverty, could drag down the prospects for prosperity and stability in the Americas.

Fortunately, there is a bright side to this story. With the exception of Cuba, all governments in the hemisphere are democratically elected; furthermore, development is being collectively pursued through the Summit of the Americas process. In addition, the governments of the Western Hemisphere are committed to establishing the FTAA by 2005 and agriculture remains central to WTO negotiations. This new momentum toward freer and fairer trade in the hemisphere coincides with a growing demand for agricultural products and other products, especially in the aging capital-, technology-, and service-intensive economies of the north. Many countries in the LAC region have a comparative advantage, at least over the near term, given their human and natural resource endowments and the competitive changes associated with globalization.

With market windows of opportunity now available to USAID-assisted countries in the LAC region, the stage is set, more so than in the past, to significantly expand demand-driven rural growth through strategic interventions in trade capacity, competitiveness, and broadened access to markets. Conditions are also especially favorable for establishing inclusive economic growth, with greater effectiveness in reducing poverty.

B. Poverty in LAC

"We venture the opinion that an important reason why the policy record has been lacking is because the causes and dynamics of poverty have been much misunderstood. Setting the record straight regarding what creates rural poverty and how specific individuals and communities have escaped poverty is thus an important part of a solution" (de Janvry and Sadoulet 2000).

1. Extent, Degree, and Location of Poverty

While a modest decline in the percent of people living in poverty in LAC has taken place over the last decade, the absolute number of poor is increasing in the region. The World Bank indicates that by the mid-1990s, “1 person in every 3 was poor and 1 in every 6 was extremely poor” (IBRD 2001). In fact, the poorest quintile of LAC’s population consumes only 80 percent of the minimal nutrition requirement — strikingly comparable to figures for sub-Saharan Africa and South Asia (Pinstrup-Andersen and Babinard 2001). USAID food security reports are also alarming: in Guatemala, 42 percent of children under the age of five suffer from chronic malnutrition. While poverty in the LAC region has become more of an urban problem, with roughly two-thirds of the poor living in urban areas, persons living in rural areas are still twice as likely to be poor than urban residents. Further, more than half of the malnourished and food-insecure live in rural areas — in other words, the extremely poor are predominantly rural. Extreme poverty, defined as lacking the income needed to cover the cost of the minimum nutritional requirement, characterized 27 percent of the rural population in Latin America in 1997, and affecting 41 percent of the rural population in Peru, 53 percent in Guatemala, and 59 percent in Honduras.

For Latin America excluding Brazil, rural poverty is extensive; its incidence has stayed constant or is rising and the number of rural poor is increasing. Using a poverty line defined as twice the expenditure required to achieve minimum nutrition, the incidence of rural poverty was 51 percent across Latin America in 1997. The incidence of poverty was above 50 percent in six of 12 countries with data compiled by CEPAL for 1999: Mexico (53 percent), Colombia (54 percent, Peru (61 percent), El Salvador (62 percent), Guatemala (75 percent), and Honduras (80 percent). Rural poverty is especially pervasive in Central America. For Latin America in general, rural poverty represents 30 percent of total poverty; but it accounts for most of the poor in Central American countries: Panama (52 percent), Honduras (55 percent), Costa Rica (58 percent), El Salvador (62 percent), and Guatemala (68 percent) (de Janvry and Sadoulet 2000).

The relationship of gender to poverty is complex, and, while this varies from country to country, there is no hard evidence that women are disproportionately poor. However, there is evidence that poor women have more difficulty in accessing measures that reduce poverty such as institutional structures, credit, and input supplies. Such access is the basis for increased farm incomes and the start up of non-farm microenterprises that provide the source of much of the employment in rural areas (Mellor 2000). Despite the overall reduction in rural employment, the proportion of women in the rural work force has gone up. Women now own and operate from 30 to 60 percent of all microenterprises, one of the regions fastest growing subsectors. The growing contribution of women to family income has enabled an increasing number of rural households to avoid poverty altogether or at least soften its effects (Echeverría 1998). Thus, women must be given proportionate attention when dealing with the rural economy.

Ethnicity and poverty are highly correlated in the region, with 80 percent of the region’s indigenous population living below the poverty line. Indigenous people not only play a key role in the conservation of cultural traits and values, but also in maintaining

traditional systems and knowledge relating to biodiversity and the sustainable use of natural resources. In many cases, indigenous communities are located in the most fragile areas, often adjacent to or within the boundaries of nature reserves. Indigenous people have lacked equitable access to land, credit, infrastructure and technology, and other knowledge sources and services (Echeverría 1998). A strategy for rural prosperity that reduces poverty and focuses on conserving natural resources needs to consider the basic human rights of indigenous populations and include interventions that target them for inclusion in economic activities.

2. Rural Poverty Is Multidimensional

Income is an important dimension of welfare and indicator of poverty, but poverty has other dimensions. Other elements include: the basic needs of food, health, education, and housing; the satisfaction of being employed; empowerment; the strength of community relations; legal and human rights; and political freedoms (World Bank 2000). Poverty in basic needs compounds income poverty and the degree of satisfaction of basic needs in rural areas is generally a fraction of that found in urban areas. Food consumption by people in the lowest 20 percent of the income distribution is estimated at only 85 percent of minimal nutritional requirements, compared to 127 percent in the highest income quintile.

These data indicate the poor in LAC are only slightly better off than the poor in sub-Saharan Africa and worse off than poor people in Asia. In the LAC region in 2000, only 62 percent of the rural population had access to an improved source of water, compared to 94 percent of the urban population. Similarly, only 49 percent of the rural population had access to improved sanitation, compared to 87 percent of the urban population. Levels of education attainment are much lower for children in rural areas compared to urban areas. Due to space limitations, only food insecurity will be elaborated upon here, given it might be considered the most fundamental of the basic needs. Also, it is illustrative of the overall poverty situation in LAC and indicates patterns of rural-urban differences, with respect to the degree that other basic needs are being met.

Food insecurity remains a large problem in the LAC region, with national level food supplies still inadequate in at least a half dozen countries. Lack of economic access — in other words, poverty — is the root cause of food insecurity in LAC. Poverty and large inequities in income and asset distributions mean many households are food-insecure, even in countries with adequate food supplies at the national level. Countries and households in the region are also vulnerable to transitory food insecurity as a result of external shocks, both environmental (hurricanes, earthquakes, floods, and droughts) and economic, such as the recent fall in coffee prices.

Chronic malnutrition is a serious problem in eight LAC countries, with rates over 20 percent. The problem is most serious in Guatemala, where over 45 percent of all children under five are chronically malnourished, followed by Haiti, Ecuador, and Honduras, where over 30 percent of children are malnourished. The other four countries with rates above 20 percent are Peru, Bolivia, Nicaragua, and El Salvador. Chronic malnutrition is a more serious problem in rural areas. For example, over half of all children in rural areas

of Guatemala are chronically malnourished, compared to less than one-third of children in urban areas. In Peru, the prevalence of chronic malnutrition in rural areas is three times greater than it is in urban areas (40.2 percent compared to 13.4 percent). Higher malnutrition rates in rural areas are the result of higher levels of poverty and poorer access to basic needs, including access to improved water and sanitation and education.

3. Roots and Correlates of Poverty

Income inequality. Front and center with low growth and high incidence of rural poverty is LAC's income distribution, more skewed than any other region in the world. Despite relatively high income levels compared to other developing regions, the highly unequal distribution of income between sectors and within the rural sector results in high incidences of rural poverty. In LAC, 25 percent of national income goes to just 5 percent of the population and 40 percent goes to the richest 10 percent; in Southeast Asia, by comparison, the richest 5 percent receive 16 percent. In developed countries, the average is 13 percent. Despite a shift in donor focus toward strategies directly targeting the poor through social investment funds, microenterprise lending, delivery of social services, and other special programs, LAC's income inequality changed little during the 1990s.

The relationship of globalization and income inequality is a much-debated point. Globalization seems to offer so much opportunity, linking people and markets across borders in ways previously unimaginable, yet it can also widen existing gaps between haves and have-nots both locally and globally. With livelihoods threatened and the perception that such insecurity stems from inequality of opportunity, the potential for social conflict is strong. Yet income inequality in the LAC region is actually a reflection of inequitable access to know-how and other productive assets, not of globalization. And LAC's high level of income inequality reduces the impact of economic growth on poverty reduction.

Factors influencing poverty. Poverty is a condition that feeds on itself. Yet poverty is generally not defined as something in and of itself, but rather as the *lack* of one or more of a number of things of value. It might best be described as the result of a number of complex, interacting, value-producing processes, with the complexity of interactions often making it difficult to distinguish between cause and effect. To readily identify the key factors influencing poverty, these processes are defined here as simply the functions of assets (resources, including services) and the enabling environment, made up of opportunities and adversities. That is, factors influencing poverty are considered as assets, opportunities, or adversities. Assets are multidimensional and can be categorized in many ways, as described later in this document in the section on access to assets. For now, the concept that a wide array of assets can influence the poor is sufficient.

Access to assets, whether through ownership or otherwise, strongly influences household income. Poor rural households are highly heterogeneous in their access to such assets. Households in poverty are those with low endowments and weak ability to access all assets. Because of the heterogeneity of asset positions and substitution effects in income generation among assets, there is the potential for numerous alternative paths out of poverty by altering access to assets (de Janvry and Sadoulet 2000).

Among factors determining the enabling environment and its effects on returns to assets, and therefore on poverty, the following are considered the most influential: a) markets: product and factor markets, rules of trade, and market access; b) governance: democratic, economic, local participation, public (government) and private; c) technology: agricultural and non-agricultural production, biotechnology, communication, information management, transformation, packaging and transport; d) location or regional context; e) economic growth; and f) economic and environmental shocks. Even with such simple definitions, it can be argued whether an influencing factor is part of the enabling environment, an asset, or both. In reality, what a particular factor is defined as or in what category it is placed, matters little here. What does matter is the complexity of their roles and the interactions among them, the existence of many cross-cutting themes and issues, and, how these impact on the rural economy and the rural poor. Some thoughts follow:

Markets. Unless there is a market for what poor households can produce — and the poor can access it — opportunities to escape poverty are extremely limited. A market can present opportunity or adversity for a household, depending on whether its asset endowment and the overall enabling environment provide comparative or competitive advantages or disadvantages. The effects of changes in price and transaction costs vary greatly among poor households because these households are heterogeneous with respect to asset endowments and the enabling environment. For instance, a fall in the market price of maize in Mexico caused by NAFTA will hurt net sellers, benefit net buyers, and leave most autonomous households unaffected; some net sellers will become self-sufficient while some autonomous producers will become buyers (de Janvry and Sadoulet 2000).

Governance. The influence of governance on poverty is strong, principally through its impact on access to assets and markets in either absolute or relative terms, such as through its direct and indirect effects on transaction costs. Obvious examples are the connections between governance and decisions concerning the following issues: investments in public goods and services; establishment and enforcement of rules on trade and commerce; mechanisms for dispute resolution; and the role played by social assets, including ethnicity and gender. Governance is a major determinant of whether the enabling environment presents opportunity or adversity for those in poverty. As LAC countries become more urban, investments and interventions with respect to governance become increasingly important for economic growth, reduction of rural and urban poverty, and environmental preservation.

Science and technology. Technology affects poverty through influences on the enabling environment, creating or eliminating opportunities for the poor with effects on transaction costs and the productivity of assets. The impact on poverty can be either direct or indirect. Technology can directly reduce poverty by increasing returns on the productive enterprises of the poor. It can also have indirect effects on poverty through its impact on product and factor markets. For example, the adoption of agricultural technologies by poor and non-poor farmers can affect poverty through its effects on: 1) the price of food for consumers; 2) employment and wages in agriculture; and 3) employment and wages

in other sectors of the economy, through production, consumption and savings linkages with agriculture, lower costs of agricultural raw materials, and foreign-exchange contributions of agriculture to overall economic growth.

Regional context. Location and the corresponding regional context influence poverty through unequal opportunities across regions to asset endowments and their use to generate income — that is, due to the effects of differences in the enabling environment. Examples of some of obvious regional differences include natural resource endowments, climate, access to public goods and services, access to markets (Mexico and NAFTA versus Guatemala and no NAFTA), and differences in governance.

Ethnicity. A study of rural poverty in Mexico found that poverty is often tied to indigenous populations (de Janvry and Sadoulet 2000). The study revealed that ethnicity (considered here as a form of social capital) lowered income by nearly 20 percent in the lowest half of farm sizes. Indeed, when one looks at Bolivia, Peru, Guatemala, and Ecuador, among other countries, it is hard not to conclude that a similar relationship of poverty and ethnicity probably exists in those countries as well.

Economic growth. Sustained economic growth is essential for both poverty reduction and social and political stability in the LAC region. Notwithstanding the income inequalities noted above, we must move past simple arguments on whether we should focus on making the pie bigger or on dividing it more equally. Clearly *both* are necessary. It is also clear there is much to do with respect to growing economies and expanding the proportion of economic benefits that go to the poor. Setting priorities depends on circumstances (assets and enabling environment) that determine the potential for economic growth and the likelihood that a targeted poor population will realize sufficient benefits.

External shocks. The countries of LAC remain vulnerable to natural disasters and other external shocks that retard growth and contribute to poverty. Recent external shocks include hurricanes Georges and Mitch and the *El Niño* and *La Niña* phenomena, the Asian financial crisis, a recent drastic fall in coffee prices, and assorted droughts, floods, and earthquakes. It seems the poor — especially the rural poor — must struggle to obtain a fair share of economic benefits, but trouble finds them with ease. In truth, it is the lack of assets and poor access to opportunities that makes the poor so vulnerable, with major setbacks caused by even relatively minor adversities. Major shocks are devastating, wiping out a lifetime of savings and totally eliminating income-generating opportunities for extended periods of time. Such events thwart poverty reduction efforts and, even worse, pull significant numbers of people back into poverty. Measures to help protect the poor from such devastating effects and assist in recovery can play a major role in reducing poverty in the LAC region.

C. Paths Out of Poverty

1. Multiple Pathways to Prosperity

In their review of the status and determinants of rural poverty in Latin America, de Janvry and Sadoulet (2000) describe four alternative paths out of poverty:

An *exit path* is defined as rural-to-urban migration. That this has been a major contributor to the relative decline in rural poverty in Latin America over the past three decades is well documented. Furthermore, recent trends indicate that Latin America-to-the-United States migration has become another element of the exit path. As de Janvry and Sadoulet point out, it is not surprising that this path exists. Rather, it is the importance of this path — and how little has been done to optimize the economic and social impact of these transitions — that is startling.

An *agricultural path* out of poverty exists for households with sufficient access to land and that benefit from favorable market, institutional, public-goods, and policy conditions, allowing them to achieve high productivity in resource use, low transaction costs in relation to markets, and potentially higher market prices. This is the path that traditional agricultural and rural-development approaches have taken. But this approach has not been widely used during the past three decades and was less common in the 1990s than during the 1970s. This fact alone should serve as a warning as to the effectiveness of old-era, rural poverty-reduction interventions, emphasizing the need for a major overhaul of such interventions. By adapting interventions to take advantage of new era, trade-related opportunities, and making this path more responsive to markets, the agricultural path out of poverty could become a reality for a much greater number of the region's rural poor.

Interestingly, while most rural poverty-reduction programs have focused on agriculture, the income strategy that most rural households in the LAC region pursue is one that combines cultivation of a small plot of land with access to off-farm sources of income. This income strategy is pervasive today, with many small landholders successfully using it to overcome poverty despite meager farm assets. This is the *pluri-active* path out of poverty and important for families that do not migrate. Until recently, most scholars have systematically ignored it; today, most agricultural and rural-development practitioners, together with policy makers, continue to ignore it.

Finally, there is the *assistance path*, the only hope for escaping poverty for those households that cannot make it on their own. The challenge here is identifying, targeting, and transferring the right type and level of assistance to help households on this path escape poverty. Accordingly, this path has three branches:

1) The *assistance path out of poverty* for the chronically poor trapped by access to insufficient assets, allowing them to escape low-level income equilibrium through a one-time transfer of a bundle of assets to allow them to move on to higher income levels.

2) The *assistance path into sustained welfare* for those unable to help themselves even with a transfer of assets. In this case, a sustained flow of income, food, or other resources is needed for them to move over the poverty line and stay there. This is an extremely costly proposition and one that the developing countries of LAC can ill afford.

3) The *assistance path through safety nets* for overcoming transitory poverty caused by shocks such as illness, bad weather, or macroeconomic crises. These safety nets are important to avoid irreversibility and keep transitory poverty from becoming permanent. Safety nets can keep farmers from selling productive assets and de-capitalizing, help households avoid taking children out of school, and prevent nutritional deficits that stunt child growth and cause cognitive impairment.

It is in the context of these alternative paths out of poverty that the roles of agriculture, off-farm opportunities, and economic growth in poverty reduction are reviewed below.

2. The Role of Agriculture and Off-Farm Opportunities

Traditionally, there has been little doubt that agriculture is a major contributor to the economies of LAC countries. The data support this conclusion, and, as such, agriculture merits significant attention in any program seeking to expand these economies. Only recently, however, has there been an increasing awareness of the magnitude of the role of off-farm income opportunities among the rural poor. These two sets of opportunities are complementary rather than competing. Yet, even today, the relationship (linkages) between increases in agricultural income and off-farm opportunities is rarely given the credit it deserves in generating rural prosperity.

Primary or production agriculture accounts for roughly 10 percent of GDP in most countries in the region. In poorer, less urban countries, such as those of Central America and Haiti, gross product from agricultural production ranges from 15 to 40 percent of total output. It is also the leading source of livelihoods for the rural population. In terms of employment, primary agricultural generates more than 25 percent of total employment in the region, on average. In Bolivia, it accounts for 47 percent of total employment, and in Guatemala, 52 percent (Pinstrup and Babinard 2001). (Note: These two countries exhibit some of the highest rates of rural poverty in all its dimensions, which is highly correlated with ethnicity and gender).

Increases in agricultural production and productivity are strategically important to national economies. Agriculture and the food industry have greater linkages and associated income and employment multipliers than are found in the rest of the economy. While populations depend on agriculture for food and other raw materials, the sector also generates employment in transportation, processing, marketing, manufacturing, supply, and other input- and output-related products and services. Significant value-added is generated from agriculture-based manufacturing and services, amounting to more than 30 percent of GDP in Chile and Brazil. As agricultural production and income rise, the demand for non-agricultural goods and services increases. It has been estimated that

every U.S. $1 increase in agricultural output in Latin America increases overall economic output by almost U.S. $4 (Pinstrup-Andersen and Babinard 2001). More importantly, much of the spending associated with increased incomes and multiplier effects takes place in rural settings, providing additional opportunities for the economic integration of the poor and increasing the potential for sustained poverty reduction.

With new opportunities for increasing agricultural exports in conjunction with further trade liberalization under the WTO and the expected adoption of the FTAA, agriculture has the potential to play an even greater role in the economic growth of the region. Indeed, the question is not *if*, but *how* agriculture can be key to economic growth. The challenge will be to take advantage of new opportunities presented by globalization and free trade by making the sector more competitive, while also reducing poverty and protecting environmental assets.

A new basis for generating rural prosperity emerges when the under-appreciated, ill-utilized comparative advantages of the import substitution era — land, labor, and agro-climate — are liberated and supported by, *inter alia*, the appropriate base of technology and knowledge. This new era agriculture and its closely tied rural sectors have the potential to generate much-needed jobs and increase returns to assets, while boosting income and exports. For example, IFPRI research observed that, in those countries where the most market reform had occurred, agriculture had become a lead or the lead economic sector, exports had expanded, and economic growth had improved notably (Bathrick 1998). In addition, LAC agriculture has begun to undergo subsector shifts that could generate broader national economic benefits. These market-led shifts are moving countries away from commodity mixes based on the self-sufficiency focus of the import substitution era toward commodities with higher value and greater value-added potential. Further, those countries showing the largest annual GDP increases also show the most dramatic increases in agricultural diversification and total sector growth. (Bathrick, Byrnes, and Stovall 1996).

Notwithstanding the important role of production agriculture, there is strong evidence that off-farm, particularly non-farm opportunities, should receive far more attention. Heterogeneous access to assets and variations in the enabling environment has resulted in income-earning strategies that are highly diverse across regions and households. The income strategy pursued by most poor rural households in LAC is one that combines the cultivation of a small plot of land with access to off-farm employment. In fact, by the second half of the 1990s, rural off-farm income represented more than 40 percent of the total income of rural households in the vast majority of countries studied.

The magnitude of the role of off-farm income among landed households is surprising to many. For example, 73 percent of landed households in Mexico and 34 percent in Nicaragua derived more than half of their income from off-farm activities. Nevertheless, off-farm sources of income serve as substitutes for farm incomes derived from access to land. In Mexico, the share of off-farm household income falls from 86 percent on small farms to 40 percent on larger farms. In Nicaragua, where access to off-farm incomes is reduced, these shares drop to 68 percent and 16 percent, respectively. Interestingly, levels

of off-farm income increase directly with farm size and land assets. Among off-farm sources of income, agricultural wage income is the most equal in this respect, while other incomes (non-agricultural wage income, self-employment, migration, and rents) are highly related to land assets. Land-poor households are thus confined to easy-entry, low-paying, farm-labor-market activities, while wealthier households can access higher-paying activities (de Janvry and Sadoulet 2000). In addition to the labor market and traditional rural enterprises, rural services, crafts, ecotourism, and forest products are increasingly important sources of off-farm income.

3. Economic Growth and Poverty Reduction

Rural poverty responds to aggregate income growth as well as income shocks. In Latin America, overall rural poverty fell during the expansion of the 1970s, rose during the debt crises and recessions of the 1980s, and fell again as economies recovered in the 1990s. However, in countries affected by economic crises in the 1990s, rural poverty rose once again. Examples include Mexico during the 1994-1996 peso crisis and in Venezuela during the 1990-1994 period (de Janvry and Sadoulet 2000).

Economic growth is key to poverty reduction and social and political stability in the LAC region. However, the region did not grow fast enough during the 1990s to reduce its vulnerability to natural disasters and other external shocks that retard growth. LAC has been hard-hit by recent events, including earthquakes, hurricanes, *El Niño*- and *La Niña*-associated floods and droughts, and the Asian financial crisis. According to World Bank estimates, growth in the region declined from 3.8 percent in 2000 to 0.9 percent in 2001. World Bank projections made in early 2001 were relatively optimistic about LAC's growth prospects over the first decade of the 21st century. However, recent events and the worldwide economic downturn will almost certainly curtail growth in 2002 and perhaps beyond, as slower growth in U.S. and other markets means declining markets and slower growth for LAC exports. LAC countries face a challenging external environment in 2002, with weak export demand, falling commodity prices, declining international tourism, and heightened capital-market risk aversion.

Even if the outlook were more optimistic, growth alone is not the answer. While GDP growth on the order of 4 to 5 percent a year is clearly better than no growth at all, it does not amount to much more than a poverty-holding pattern after factoring in population growth and the low economic participation of the poor. Moving sizable numbers of rural people out of poverty over the near term requires sustained annual growth levels of 6 percent or more (8 to 10 percent would be more desirable but is of questionable feasibility within the LAC context). Even though countries experience impressive and consistent growth, poverty, especially rural poverty, can remain persistent and intractable. While experience around the world shows that sustained growth rates on the order of 8 to 10 percent a year are not impossible, as demonstrated by some of the Asian tigers, such rates are certainly unusual, especially for the less-developed countries in the LAC region.

If left to markets alone, economic growth will not likely have the desired impact on poverty reduction. In instances such as Japan, Europe, and the United States after the great wars, where rapid growth occurred with a poverty-reduction impact, the enabling

environments and conditions with respect to access to assets were probably much more pro-poor than those currently present in the LAC region. In this vein, it is estimated that, to double the income of the poorest 20 percent of Hondurans under the existing enabling environment, GDP must grow at about 6 percent a year over the next 25 years, given a current population growth rate of 2.3 percent. However, by altering the enabling environment, empowering the poor, and improving access to assets, this time could be cut by about one-third (Cotler, Llona and Tomba 2000).

Furthermore, as Timmer[1] and Deininger and Squire[2] suggest, the relationship between growth (especially agricultural growth) and poverty is affected by inequality, particularly with regard to access to assets. In Guatemala, the 1950-1980 period of growth occurred without a significant impact on rural poverty rates. However, the growth that occurred in association with the development of agro-exports during the 1980s and early 1990s was much more broadly based, as the required asset endowment and enabling environment in that particular region of the country were favorable to poor, small producers. Conversely, in Paraguay during this same period, growth associated with agro-exports largely excluded the rural poor because the asset endowment and enabling environment were not pro-poor. In Chile, rapid growth in agro-exports in the 1980s yielded mixed results: positive effects on employment but a negative impact with respect to benefits associated with land assets, as opportunities favored larger holdings (Carter, Barham, Mesbah, and Stanley 1995). For growth to be broadly based, it must be accompanied by interventions that counter market failures by promoting equality of opportunity and targeting the poor — that is, interventions that support *pro-poor growth*.

D. Evolution of the Development Context

1. Changes in Approaches

Over the past three decades, development approaches and programs have changed and evolved, at times as a knee-jerk response to the political needs of donors, sometimes because previous approaches had failed and there was a need to try something new — and, occasionally, because a better way had been found. Unfortunately, far too often it was only the rhetoric that changed, along with some of the bells and whistles, while the fundamental mind-set of practitioners and on-the-ground programs remained mired in the old ways or changed at a glacial pace. To highlight lessons learned, we present below an overview of the evolution of development strategies, based largely on a description of four approaches by Robert Burke (Burke 2001).

First, in what can be termed the *technofix* approach, practitioners attempted to expand the development role of the important successes of the Green Revolution. There was a widespread perception that scientific research and accompanying extension, with a strong focus on a small number of basic food crops, could significantly reduce rural poverty. Well into the late 1980s, a significant number of development professionals continued to

[1] Timmer, P.C. 1995. *Agriculture and economic development revised.* Domestic and International Agribusiness Management 11: 73-116.
[2] Squire, Lyn and Deininger, Klaus. "New ways of looking at inequality and growth," *DECNotes*, No. 28: February 1997.

support this approach. However, a major problem with *technofix* was that there was no "next big thing" after semi-dwarf wheat and rice and hybrid corn, with comparable productivity gains. An even more important flaw, though, was that *technofix* effectively ignored the enabling environment into which technological innovations had been dropped. Most technological innovations increase the productivity of certain factors and reward the owners of those factors, whether poor or not, together with food and other primary-product consumers. In sum, the problem with *technofix* was that it failed in identifying and defining the problem of rural poverty. As the approach effectively ignored the fact that increases in food production do not necessarily translate into reductions in poverty, it failed to adequately describe the role of agriculture in generating income for poor people.

Second, *integrated rural development* (IRD), which evolved in reaction to the lack of success of *technofix* and other magic-bullet approaches, attempted to attack a broad range of constraints. It ran out of gas quickly in USAID, primarily because of its high cost per beneficiary. Ironically, the major lesson learned from this experience was the importance of infrastructure, the cost of which precluded its widespread application and led to its demise. The other deathblow was public-sector involvement. Governments selected who, what, when, and how, and, more often than not, got it wrong — another lesson learned.

The third in this generation of approaches can be described *as the magic of the market place, or get the price right first and all good things will follow*. This approach can also be described as the period of structural reform, which emphasized the critical importance of the macroeconomic environment and need for adequate incentives. As implemented, the shortcomings of this approach were its overemphasis on what governments should *not* do and, in retrospect, too little attention as to what they *should* do. The essential role of government in providing infrastructure, education, and financial regulation and guaranteeing property rights and the rule of law were mostly left out of the equation. What was new and insightful about this approach was the recognition that leveraging progress in economic growth to reduce rural poverty in a few years depended on a favorable enabling environment. Burke suggests "this does not preclude 'retail' activities but the role of such activities needs to be placed in the larger context." Others are of the opinion that a shortcoming of this approach was that it placed too much emphasis on the macro (wholesale or systemic) interventions and too little stress on "retail" (transactional) interventions.

Finally, Burke refers to the most recent strategy as the *growth will take care of itself and we have to deal with those left behind* approach. This approach, which places great faith in the effectiveness of markets in guaranteeing economic growth, predominantly focuses on retail programs that provide direct help to the poor — for example, microenterprise lending — without engaging often in complementary policy/institutional interventions. Like integrated rural development, the high cost-per-beneficiary of this approach has been a serious drawback. Burke goes on to comment: "Ironically, as the budget for poverty reduction activities has gotten smaller, USAID has become more, rather than less, 'retail'."

Systemic versus transactional - There continues to be debate over whether a systemic, across-the-board-approach, or a transactional approach that addresses specific perceived concerns is best. As posed, this question presents a false dichotomy. In the final analysis, the policy agenda must reflect real, perceived concerns. The question really becomes an operational issue of how to attack them, individually or generically. To illustrate, if a particular regulation stands in the way of entering foreign markets, does one wage war on the commercial code or attack the particular regulation? In many instances, it is analogous to the debate over making the pie bigger or dividing it more equally…one is likely to find both types of approaches necessary depending on the policy issue being addressed and the nature of the operational environment. These will determine the feasibility of alternative approaches. Feasibility in this case includes economic, financial, social/cultural and political feasibility. In some instances, interventions may need to be sequenced. For example, if insecurity of land tenure acts as a brake on the development of a defined area, one regularizes titles in that area, not nationally, but to make this possible a national laws or regulations may need to be changed first.

2. Donor Programs and Investments

Parallel with this evolution in approaches, there were major shifts in program focus and investment magnitude of donor activities. In the era of *technofix*, when development leaders identified agriculture as key to economic growth in poor countries, donor investments in agriculture grew. Today, such investments have fallen to their lowest levels in 30 years. During the IRD era, it was often the packaging that changed rather than the destination and level of investments. However, coming out of the LAC region's so-called "lost decade" of the 1980s, this shift became dramatic. By that time, most countries had incurred unsustainable levels of public debt, leading the United States as well as the World Bank, IMF, and Inter-American Development Bank to press for structural reform.

Under pressure to prioritize macroeconomic reform and privatization (i.e., the *magic of the market place* approach) while reducing public debt, LAC countries began to cut public-sector support for agricultural and rural development. The perception that world surplus and low prices indicated food availability per se was not a problem helped accelerate this decline. Politicians, impatient with the long time horizon for impact from agricultural investments, encouraged or even earmarked investments with highly visible, more immediate effect. New priorities emerged like democracy building and protecting the environment which was important to development as well as to constituents at home. Assistance to agriculture in LAC countries dried up rapidly in comparison to assistance to other sectors and development themes.

The general decline in donor/USAID assistance to the region during the 1980s and 1990s was accompanied by a more-than-proportionate decline in USAID investment in agriculture and the rural sector. Investments were no longer being made in infrastructure (e.g., farm-to-market roads and research). For a while, especially in Central America, USAID shifted its agricultural focus to non-traditional export crops with the hope this would help generate foreign exchange earnings to reduce debt loads and secondarily help

the poor. Even this did not last, and eventually assistance was scaled back in policy reform, export promotion, non-traditional products, and productivity enhancement, often despite its positive impact (e.g., in El Salvador and Guatemala). The scope of geographic coverage was reduced, leading to local investments that targeted specific needs, often the poorest of the poor. In cases with strong inter-linkages across program areas, attention to agriculture was achieved under other objectives — for example, hillside farming, achieved under an environment objective.

3. Government, Political Voice, Protectionism, and Globalization

The change in the role of the state or government is another important aspect of the evolution of the development context. Macroeconomic or structural reform led to extensive reductions in state interventions in matters affecting rural economies, as well as the dismantling of many institutions traditionally responsible for the rural sector. The withdrawal of public-sector services in many instances left many rural inhabitants with few opportunities to improve human capital through education and health services, and without the means to meet credit and infrastructure needs (Echeverría 1988). This situation has been exacerbated by a distribution in population, education, and income that has taken on an urban bias, rendering the voice of the rural poor ineffective in political decision making.

Another trend has been the shift from closed, inward-looking economies to more open, outward-looking economies. The LAC region has aggressively moved to cope with globalization, forming subregional trading blocs, pursuing establishment of the FTAA by 2005, and participating in or negotiating free trade agreements (see Annex B). This shift from protectionism to globalization, with new trade regimes coming into effect, has brought unprecedented changes for rural economies in at least two major ways. On the positive side, it has provided opportunities to exploit existing comparative advantages to access new markets. On the other hand, it has exposed previously protected rural producers to a barrage of new competition.

4. Why Change the Strategic Approach Again Now?

As stated, it is opportune to rethink assistance to the rural sector now because the ongoing transition to free and fair trade in the Hemisphere coincides with a growing demand for certain agricultural products, particularly in the United States. Given the natural-resource endowments and market opportunities in the Region, the stage is set, more so than in the past and more so than in any other part of the world, to achieve significant impacts from strategic interventions to enhance agricultural competitiveness and broaden the access of the rural poor to productive assets. As a prelude to the ensuing discussions of factors to consider in the development of a “new-era” strategic approach, we summarize from the above the reasons a new approach is called for and why now:

- Rural poverty is a serious problem in most USAID-assisted LAC countries.
- The costs of continuing the status quo are high for the United States as well as for assisted countries, and not only in terms of lost economic opportunities.

Without change, rural poverty is likely to worsen sharply, fomenting conflict, threatening democratic rule, and leading to accelerated environmental degradation.

- This problem is not likely to be self-correcting, and traditional approaches are unlikely to achieve satisfactory progress. Past approaches are inadequate because they have not focused sufficiently on eliminating the fundamental causes of poverty: an unfavorable enabling environment and inadequate assets.

- Better methods of targeting are needed to deal with the extreme ethnic and gender inequalities characteristic of the LAC region.

- To respond to globalization and free-trade initiatives, a new approach is needed to assist countries exploit comparative advantages and increase competitiveness (to provide new opportunities and alternatives for producers of basic crops and other “protected” areas of production that harbor the poor).