

Rural Development strategy

Reaching the Rural Poor in the Latin America and Caribbean Region

24530

July 2002



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Latin America & Caribbean Region Rural Development Family

*Rural Development Strategy
Regional Development Strategy*

Reaching the Rural Poor

*A Rural Development Strategy for
the Latin America and Caribbean
Region*



The World Bank

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First printing: July 2002
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Rural Development Department
1818 H Street, N.W.
Washington, DC 20433

This paper is a contribution to the draft rural development strategy for the World Bank, which is currently pending approval by the Board of Executive Directors. The findings, interpretations, and conclusions are the author's own and should not be attributed to the World Bank, its management, its Board of Executive Directors, or the countries they represent. Some of the numbers quoted are estimates or approximations, and may be revised at a later stage.

The Latin America and Caribbean Region would like to dedicate this report to the memory of Thomas B. Wiens, LCSES Sector Manager, who passed away on July 14, 2000. His contributions and professional commitment to this initiative as well as his passion for rural development issues will continue to remain present among us for a long time.

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Abbreviations and Acronyms

AAA	Analytic and Advisory Activities
CAS	Country Assistance Strategy
CMU	Country Management Unit
ESSD	Environmentally and Socially Sustainable Development
ESW	Economic and Sector Work
FAO	Food and Agriculture Organization of the United Nations
GDP	Gross Domestic Product
GEF	Global Environmental Facility
LCR	Latin America and the Caribbean Region
LCI	Colombia, Mexico, Venezuela, Country Management Unit
LCSES	Environmentally and Socially Sustainable Development Sector Unit of LCR
LCSFP	Finance Private Sector and Infrastructure
LCSHD	Human Development Sector Unit in LCR
LEN	Lending
NAFTA	North Atlantic Free Trade Agreement
NRM	Natural Resources Management
OECD	Organization for Economic Cooperation and Development
PREM	Poverty Reduction and Economic Management
PRSP	Poverty Reduction Strategy Paper
QAG	Quality Assurance Group
RDV	Rural Development Department
RNFE	Rural Non-Farm Employment
SPN	Supervision

Acknowledgments

This document is one in the series of regional development strategies developed for the 2001 update of the World Bank's Rural Development Strategy, *Reaching the Rural Poor*. The report is the result of a team effort which benefited from an array of precious contributions. The report's authors are Isabelle Tsakok and Adolfo Brizzi with the valuable contribution of Luis Coirolo. Samuel Taffesse provided research assistance throughout this effort and was responsible for Appendix 2, the statistical backbone of the report, and Appendix 3 on the portfolio. Dorothy Jenkins was responsible for processing the document. The task was managed by Mark Cackler and led by an intersectoral Regional Steering Group.

We want to thank the Regional Steering Group and specifically its chairman Olivier Lafourcade (Director, LC1 Country Management Unit) for the strong guidance and input received. The members of the Group are Ana-Maria Arriagada (Sector Manager, HD), Adolfo Brizzi (Sector leader, LC1), Mark Cackler (Sector Manager, ESSD), Luis Coirolo (Lead Specialist, ESSD), Maria Correia (Sector Manager, PREM-Gender), Jeffrey Gutman (Sector Manager, FPSI-Transport and Urban), Norman Hicks (Sector Manager, PREM-Poverty), John Redwood (Director, ESSD) and Isabelle Tsakok (Senior Economist, ESSD).

Many people, inside and outside the World Bank, contributed to this report. A panel headed by Csaba Csaki, (Senior Advisor for Rural Strategy and Policy) comprising Rural Development Department (RDV) and Development Economics (DEC) staff provided useful comments on several drafts of the regional strategy. We would like to thank colleagues of the region's ESSD Department, in particular Matthew McMahon, Cora Melania Shaw, Steven Schonberger, Jorge Uquillas, Robert Kirmse, Elsie Garfield, José Simas, Nadim Khouri, Maurizio Guadagni; colleagues of the Poverty Reduction and Economic Management Department, in particular Quentin Wodon and Mohamed I. Ajwad (poverty estimates, and social and economic indicators); the Inter-American Development Bank, in particular Ruben Echeverría (LCR agriculture strategy); the Food and Agriculture Organization, in particular Aidan Gulliver and John Dixon (farming systems), and the participants in the regional consultation organized by the International Center for Rural Development (CIDER, the rural branch of the Inter-American Institute for Cooperation on Agriculture, IICA) in Panama City April 3-4, 2001. . The Region is grateful to the Government the Netherlands for the financial assistance they provided for various studies conducted for the Strategy and for the regional consultation.

Foreword

This report is the contribution of the Latin America and Caribbean Region to the preparation of a new World Bank strategy and action plan for rural development. It recognizes that Latin America cannot succeed in its efforts to reduce poverty without the contribution of the rural sector. That contribution will need to be broad-based and involve the participation of all sectors in coordinated and country-driven efforts.

In the search for the right balance among the different elements of a complex agenda, the report stresses the importance of three fundamental enabling factors for the development of the sector environment: a supportive macroeconomic and trade environment, a new institutional set up for the sector and good governance, and a credible regulatory framework. It then describes six key lines of actions: i) competitiveness and growth; ii) the proper functioning of factor and goods markets; iii) the use of a regional approach to rural development; iv) the sustainable use of natural resources; v) the development of human and social capital; and vi) the strengthening of risk management and safety nets. All six elements are needed for the revitalization of the rural agenda and for the achievement of a higher impact on poverty reduction.

Fortunately we have a strong basis to build on in Latin America, by scaling up what has been proven to work and by developing the missing links so as to integrate the rural sector better with the rest of the economy and offer enhanced opportunities to the rural poor.

We are particularly proud in the region of having carried out the preparation of this document in the same way we would like to see it implemented: through a well-coordinated inter-sectoral effort, building on the particular strength of each network while also grounding the effort in the context of specific country circumstances. In this respect, we are particularly grateful to the authors and to the Regional Steering Group for the guidance they provided.

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Executive Summary

Regional Context and Key Issues

Latin America and the Caribbean, a middle-income region well endowed in natural resources. LCR is the wealthiest of the developing regions with an average per capita GNP of US\$3,940 in 1998. At the regional level, it is also the least dependent on agriculture—an average of only 8 percent of GDP in 1998. However, this average ratio hides a great variation that ranges from 5 percent in Mexico, 8 percent in Brazil, 15 percent in Colombia and 24 percent in Nicaragua. The region is also well endowed in natural resources. It has abundant tropical and temperate natural forests, with more than half the world's tropical forests, major biodiversity reserves and around a third of the world's fresh water.

An urbanized region with high inequity and poverty. LCR is a highly urbanized region. Of its estimated 519 million inhabitants for the year 2000, 391 are urban and 128 are rural. About one-third of the population is poor and about one-sixth extremely poor. Poverty incidence in 1998 is lower than in 1992 but it is only back to the level of 1986.¹ Projections for the year 2020 show that while the urbanization trend will continue and the share of the rural population will decline, the absolute numbers of people living in rural areas will remain roughly the same. Moreover, serious problems of equity exist and are particularly evident with respect to land distribution. LCR possesses the world's highest GINI (inequity) coefficients. For example, it is over 0.9 in Peru, Paraguay and Venezuela and close to those levels in Colombia and Brazil².

Market liberalizing reforms characterize the region. During the 1990s, most countries in the region made a radical departure from heavy state intervention in prices and markets towards private sector-led models of development, reducing barriers to competition in domestic markets, and accelerating the process of trade integration with the global economy. Several countries, however, lagged in these reforms, e.g., Venezuela, Ecuador, Haiti, and Jamaica. The region as a whole benefited, as evidenced by the return of macro economic stability and the decline in the average public deficits. Growth resumed, but for many it was sluggish, not sustained and with recurrent crises (Argentina, Brazil, Mexico). Growth of per capita GDP was below 1.5 percent per year in the 1990s and was accompanied by increasing inequality.³ The elasticity of poverty reduction to growth in LCR is 1 percent and in the developing world, 2 percent.

Agriculture and the rural sector will remain important for economic, social and political reasons. The high rate of urbanization notwithstanding, the strategic importance of agriculture and the rural sector remains. There are four major reasons.

- **Contribution to employment and to GDP.** Despite their modest contribution to GDP, primary agriculture accounts for a large share of the labor market: 20 percent in Mexico, 57 percent in Central America. However, when agriculture is broadly defined to include agro-industry, its share of GDP is much higher. For example, in Argentina, Chile, Brazil and Mexico (which together account for more than 70 percent of AGDP of LCR), agriculture accounts for around 40 percent of GDP (1996). Opportunities offered by the sector are still large and untapped.
- **Impact on the environment.** Any growth at the cost of natural resource degradation is a short-lived victory. If nothing else, degradation weakens the resource base, exacerbates the destructive impact of natural calamities and worsens the vulnerability of the poor. Agriculture is one of the sectors where the importance of integrating environmental and economic policies is most obvious.

¹ Poverty in Latin America: Trends (1986-1998) and Determinants, Quentin Wodon, Rodrigo Castro-Fernandez, Kihoon Lee, Gladys Lopez-Acevedo, Corinne Siaens, Carlos Sobrado, Jean-Philippe Tre. World Bank, April 2001;

² Unpublished data prepared by Klaus Deininger, World Bank. Data varies from 1960s to 1990s.

³ Source: Poverty and policy in Latin America and the Caribbean, by Quentin Wodon, with contributions from Robert Ayres, Matias Barenstein, Norman Hicks, Kihoon Lee, William Maloney, Pia Peeters, Corinne Siaens, and Schlomo Yitzhaki, World Bank Technical Paper no. 467, World Bank, Washington, D.C., 2000; Table 2.1-2.4.

- The rural sector contributes to the development of the other sectors of the economy. High-productivity agricultural transformation has fuelled the growth of most high-income industrialized countries. Urban demand for processed foods is rising and so is the demand for processed goods of higher quality. Moreover, the quality of urban development will be determined by a successful transformation of the rural sector.
- *Higher incidence of poverty in rural LCR.* Rural areas have the highest incidence of poverty (63 percent). Social and economic indicators in rural areas are low and much worse when compared to urban areas. In addition, rural poverty disproportionately afflicts some groups. In high rural-urban migration areas, the elderly, women and children are left behind. There is also a close relationship between rural poverty and ethnicity. The majority of the indigenous peoples (80 percent of some 19-34 million), found mainly in rural Mexico, Peru, Colombia, Bolivia, Ecuador and Guatemala, are poor.⁴ Destabilizing factors (violence, drugs, unrest) often find their origins in rural areas. This situation can become socially and politically unsustainable.

Lessons Learned

Macro reforms were necessary but insufficient to remove the structural impediments constraining the rural poor. While the macro reforms helped put in place a policy framework more conducive to growth and private sector involvement, they were not complemented by “second generation” reforms. These are measures to improve the competitive functioning of factor and goods markets and reduce the high inequalities and the deep-seated structural problems that severely limited access of the rural poor to economic assets, markets, services, technology and infrastructure. The macro reforms did not reverse the long history of un-egalitarian development.⁵ The rural sector remained relatively disconnected from the rest of the economy and many structural distortions and regional disparities were left untouched as the micro agenda was overlooked. In terms of its contribution to rural poverty, the structure of growth is as important as growth figures per se. In many cases agricultural growth was concentrated in the commercial sector and did not trickle down.

Sectoral policies and programs may skew incentives. Some countries implemented explicit or implicit taxation policies towards the sector through overvalued exchange rates regimes, industrial protection or taxation of export commodities (with strong comparative advantage) and protection of import-substituting food (with little comparative advantage). These protection and taxation patterns were highly inefficient. In a number of countries the incentive framework for agriculture remained relatively unfriendly with negative protection rates and negative real prices to producers for most crops, e.g., Mexico. The use of subsidies to address poverty also had perverse effects. Subsidized directed credit through parastatals was highly inefficient in terms of its fiscal cost, delinquency rates and outreach capacity. It also crowded out and inhibited the development of local self-sustained savings and loan initiatives. Subsidies for investment and equipment are difficult to target and bear the risk of concentrating on medium and large commercial farmers. This also drives up land prices, induces concentration of land and makes access to land by the poor more difficult. Moreover, productivity improvements should be more closely associated with competitiveness as subsidies may skew the incentive structure of the various crops.

Need to find the right balance. This rural Action Plan argues that LCR cannot succeed in its poverty alleviation efforts without the contribution of the rural sector. However, finding the right balance is still a challenge. The development community has gone from one extreme to another, searching for the appropriate instruments and approaches to translate a holistic vision into effective actions. Too often, implementation capacity fell short of conceptual sophistication or poor policies kept good projects from bearing fruit.

Integration through a territorial, decentralized approach. While the integrated rural development projects of the 1970s were right about integration, they were wrong about the way they were carried out. These projects were implemented top-down, with no participation, no decentralization and in an adverse policy environment. Much can be recovered from the concept of integrated rural development in the new context of decentralization,

⁴ Source: Rural Poverty in Latin America and the Caribbean, By Alberto Valdes and Tom Wiens, May 30, 1996, Paper delivered at the Annual Bank Conference on Development in Latin America and the Caribbean; pp 7.

⁵ Sources: Rural Poverty in Latin America, edited by Ramon Lopez, Professor, Department of Agricultural and Resource Economics, University of Maryland, and Alberto Valdes, Agricultural Advisor, World Bank, Washington DC, Macmillan Press Ltd, Great Britain, 2000, St. Martin's Press, LLC, United States, 2000, pp 2. Beyond Trade-offs: Market reform and equitable growth in Latin America, Nancy Birdsall, Carol Graham, Richard H. Sabot, editors, Inter-American Development Bank, Brookings Institution Press, 1998, pp 3.

differentiation, democratization and better policy framework that characterize most LCR countries today. There is a compelling need to address equity issues in the context of a rural development strategy repositioned in the context of its “rural space.” Under this approach, agriculture, off-farm activities, employment opportunities, social cohesiveness, municipal development and access to markets and services are seen as equally important elements of a strategy that blurs traditional divides among sectors and among rural and urban approaches.

Need to build bridges beyond the community level. Community participation approaches helped build social capital and proved to be an effective mechanism for delivering micro-projects and productive investments. However, to ensure institutional sustainability, there is a need to link these community-driven projects to local governments. Such an approach should also build bridges with the rest of the economy, promoting producers’ organizations and providing the critical linkage to integrated supply chains, where the private sector would play an increasing role in the development of the family farms sector.

Need a culturally- and gender-sensitive approach. It is clear that the pervasiveness of poverty rates among ethnic minorities and the increasing role of women in rural society raise the issue of social inclusion and access to productive factors and assets. Government programs should devise approaches more adapted to cultural preferences and gender needs.

Objectives and Strategies

Main objectives. The overarching objective of the proposed regional action plan is to reduce rural poverty and promote broad-based growth in the context of the sustainable management of natural resources.

Strategic thrusts. The strategy revision process emphasizes the holistic nature of rural development, as opposed to focus on a single sector—agriculture, and the urgency to go beyond vision into action. The strategy is to build on successful experiences and scale up what is working well, strengthen the missing links and work better together across networks so as to better balance the different elements of a complex package and achieve synergy. A rural development strategy has to include several differentiated elements directed at different population groups while acknowledging that an adequate overall macro and policy framework is essential. In addition, the strategy must convey the message that while the rural sector confronts many challenges, it also presents many opportunities that make it potentially attractive to investors and to rural dwellers, if the right mix of policies, institutions and support programs can be put in place.

Better addressing the rural-urban dynamics. While an important preoccupation of policy makers is to maintain rural-urban migration at manageable levels, this migration will continue. More training and education opportunities for the rural poor are important for facilitating their absorption into other sectors of the economy. However, outright promotion of migration as a rural poverty alleviation strategy is not viable, because it would exclude from a rural modernization process a large smallholder sector with growth and employment potential. Moreover, in a number of cases the worsening of urban poverty shows that urbanization can be seen as a solution to poverty only if it is the result of real access to better opportunities. For the millions who continue to remain in rural areas, the improvement in living conditions will depend on improvements on several fronts. These include intensifying smallholder agriculture and increasing productivity; providing infrastructure and services; improving access to assets such as land, education and financial services, and to markets; ensuring the sustainable management of the natural resource base on which they base their livelihoods, and providing better risk management tools.

Integration through regional development and a new “institutionality.” A “rural space” approach based on regional development will provide the underlying vehicle to pursue sectoral integration. This requires improving the absorptive capacity of secondary towns in the context of increasing urban-rural integration and interaction. It also calls for investments in basic infrastructure, promotion of new off-farm opportunities, better integration with the labor markets, continued emphasis on community-driven development, municipal strengthening and the building of social and human capital. It also allows for better integration of environmental issues in an effort to build consensus around possible “win-win” opportunities. In this context, a new “institutionality” will need to be built around the concept of increased participation of the local actors, farmers’ organizations, civil society, local governments and the private sector. This means a revision of roles where beneficiaries of government programs become clients and take leadership of regional planning and priority setting, guide and negotiate local development processes and create the conditions for greater accountability and better governance.

Productivity, competitiveness and increased private sector involvement are key engines of growth. Agricultural productivity, competitiveness and access to technology and markets will remain critical for many producers

regardless of their size. However, in many cases the smallholder sector working for the domestic market should be subject to more attention and support in view of its potential and untapped contribution to growth and employment. Conditions for increased private sector involvement will need to be studied and barriers removed through private-public partnership.

Social safety nets for the severely marginalized. There is a group of rural poor who will remain marginally productive and unable to benefit from the rural non-farm economy or to migrate. Members of this group are typically older and female heads of households and farms in poorly endowed areas. For this group, social safety nets and risk management combined with the promotion of income-generating activities, both off-farm and on-farm, are critical to assure basic, decent living standards.

The Action Plan

Enabling factors and lines of actions. The proposed Action Plan contemplates a series of priorities organized along a two-pronged approach. The enabling factors may be considered as critical underlying elements in the implementation effectiveness of the strategy in any country. The priority lines of actions describe the possible applications subject to country circumstances.

Enabling factors

Maintain a supportive macroeconomic and trade environment. This advocates a more pro-active role in the discussion of macroeconomic and policy issues that affect the rural sector. It also supports renewed engagement in economic and sector work to provide better underpinning and understanding of the factors that determine rural poverty, the incentive framework, the functioning of land, labor and financial markets, the decentralization process for the sector, etc.

Promote a new “institutionality” for the sector and good governance. The combination of increased decentralization and the development of local democracy are key elements to progressively create the conditions for greater participation and accountability at the local level. The main debate around the issue of how to better articulate the social demand for services with the institutional supply calls for a rethinking of the respective roles of the public sector (both central and sub-national governments), civil society, interest groups, private sector, etc...

Develop a credible regulatory framework. This includes a number of elements conducive to more effective private sector participation and better functioning markets. It includes: a) establishing better-integrated price and market information systems; b) developing appropriate regulatory frameworks and enforcement capacity as critical factors for secure transactions, inventory-based financing, crop insurance, non-bank financial institutions, contract farming and “collateralization” of assets; and c) facilitating the development of commodity quality standards based on industry participation and needs, and the development of food safety norms.

Lines of actions

Raise productivity and competitiveness as the engine of agricultural growth. This proposes to pursue public/private partnerships for the delivery of public goods and services (such as agricultural research and extension, animal and plant health control), facilitate access to adapted technology and equipment, while improving quality and cost-effectiveness. It also promotes more efficient cropping patterns and better vertical integration in the supply and marketing chain. It argues in favor of basing future irrigation projects towards a decentralized, integrated approach to sustainable management and use of water resources.

Pursue a systematic approach to improve the competitive functioning of markets. This addresses three essential markets. Land regularization and administration are to increase access to land and promote more efficient functioning of land markets. Rural financial services are in need of urgent revival and rethinking in terms of both the efficiency of existing public or semi-public credit delivery mechanisms and the importance of the non-bank sector through “mutualistic” savings and loan approaches. Product and storage markets should be made more competitive and efficient through the development of farmers’ organizations, higher value transformation activities, better information system and inventory financing mechanisms.

Foster a “rural space” approach and regional development. It proposes a more integrated approach that blurs the traditional urban-rural divide and repositions rural development in the framework of a territorial approach. This approach will foster better integration with the supply chain, labor and financial markets, the provision of basic

infrastructure and services, and sustainable natural resources management, and will go a long way in rendering rural areas more attractive to migrants and to the private sector. Community-driven development would be scaled-up as an effective vehicle for building social capital, and delivering basic services and small infrastructure. However, the key links with local governments will be strengthened including more emphasis on building municipal capacities in the context of increasing decentralization.

Manage natural resources in a sustainable way. This is a key issue for the long-term sustainability of development programs but one that presents considerable trade-offs between short-term benefits and long-term social costs. A number of experiences exist in LCR that have developed win-win situations and instruments capable of better integrating productive, management, and conservation concerns. These initiatives are still relatively scattered and will need to be scaled-up so as to demonstrate their potential in ensuring a more sustainable use of the resource base. The Global Environment Facility should continue to play an instrumental role in facilitating better mainstreaming between conservation and development.

Build human and social capital. Expanding the delivery of basic education and health services are powerful tools for poverty reduction in a region with high rural-urban migration. Education should be seen as a priority for the rural population, and especially education for girls. It improves employment opportunities, prepare future migrants to access better jobs, and helps families plan better their own future. Development programs need to promote social inclusion, build social capital and respect cultural diversity and preferences of minority and ethnic groups which shoulder a disproportionate burden of rural poverty.

Strengthen risk management and safety nets. Finally, a series of relatively new activities and instruments would be developed and expanded to reduce the vulnerability of poor people both to economic shocks and natural disasters. This covers a range of tools like early warning systems, prevention activities, price hedging tools, and crop insurance schemes. Also social security, safety nets and income support programs can be very effective instruments to reach the poor and they should be developed according to local circumstances.

Implementation

Internal World Bank implementation issues and instruments

Cross-network participation. A major departure from the past is the development of systematic partnerships between the Rural and other networks:

- The Environmentally and Socially Sustainable Development (ESSD) network and the Poverty Reduction and Economic Management (PREM) network would work jointly to ensure that the impact of the macro policies are supportive of rural development. They will develop decentralization strategies and better understanding of the analytical underpinnings of poverty and of the incentive framework for the sector. PREM would continue to focus on promoting macro stability, adequate trade policies, competitive exchange rate regime, more supportive public expenditure programs and the removal of distorting government policies in rural markets.
- ESSD and the Human Development (HD) network would work jointly to elaborate more consistent programs to address social sector issues, participation of minorities and indigenous peoples' development. They would also promote the inclusion of culturally-consistent components in the health and education programs. They would work together to ensure consistency of implementation of Social Funds and Rural Investment Funds and strengthening of safety nets in rural areas.
- ESSD and the Finance and Private Sector and Infrastructure (FPSI) network would develop joint strategies and programs on how best to help governments in the development of rural-urban linkages and delivery of public goods and basic infrastructure services in rural areas, especially at the level of municipalities. They would also develop rural finance approaches that are consistent with the specificity of the rural sector and with the overall financial sector policies and regulatory frameworks.

A holistic approach with a country focus. The Action Plan recognizes that only a multi-sectoral approach can work and offers the strategic directions and actions to be undertaken. However, it recommends a selective implementation at the country level in view of the Bank's added value, ongoing dialogue and local circumstances. It is not a "one-size-fits-all" approach. Country Directors and Sector Leaders will be instrumental in ensuring adequacy and adaptation of the Action Plan so that it is consistent with the country policies and development agendas. The comparative strength of each network and family in each country context would determine leadership for the various initiatives and operations, but in most cases this will mean stronger inter-sectoral teams. This in turn

requires the key involvement of Sector Directors and Sector Managers who would revisit the strategic skill-mix required for implementation of the Action Plan, guide the constitution of teams with adequate skills and promote the review of the current budgetary process which hinders cross-network partnerships and support.

The high cost of safeguard policies may be a deterrent. While it is acknowledged that good compliance with safeguard policies is simply better-quality business, it needs to be recognized that projects in the rural sector present a high level of compliance requirements which imply more resources and time to prepare. This may act as a disincentive if transaction costs become excessive. It is also important to recognize the higher level of risk that staff confronts and to remove possible biases against innovation and risk-taking.

Instruments for cross-network integration. Country Assistance Strategies (CAS), Poverty Reduction Strategy Papers (PRSP) and poverty assessments will be the ideal strategic instruments to ensure that rural issues are fully incorporated and internalized. With respect to lending instruments, investment projects will continue to play an important role, especially for specific poverty-targeted approaches and innovative interventions, which require strong implementation support and field supervision. More effective integration can be pursued through the use of lending instruments along thematic lines that require blurring the “silos” and sectoral frontiers. New instruments to explore are programmatic loans. By their nature (quick disbursing) they will require an adequate policy environment for the particular subsector to be financed and solid institutions with sound procedures and implementation rules in place.

Donor Coordination

Promoting partnership is good business. It is generally felt that the strategic thrust of this rural development strategy for LCR countries is widely shared among donors. The Bank should continue to explore and develop regular channels for communication and consultations with other potential partners, to ensure consistency of strategies and to explore co-financing possibilities. Partnerships should be sought on a country basis with the objective of learning and transferring experiences and developing common ground in approaches among partners. Better consistency among donors will enhance the chances to leverage the establishment of a “rural constituency” within governments and pursue a coherent dialogue for increased effectiveness.

Implementation approaches

Strengthening client ownership. Without client ownership this strategy and Action Plan are moot. Moreover, it must be acknowledged that, in most situations, development efforts take the form of progressive quantum leaps that require considerable dialogue and buy-in from various constituencies in the country. In some countries there is already a high degree of convergence with the proposed Action Plan and most of it may already be under implementation; in others, agreement and interest may be only partial. This strategy and Action Plan should be seen as a contribution to the ongoing discussion on LCR rural development issues and the way forward. Many of the elements of the proposed Action Plan are already under implementation in one country or another, and the document essentially tries to coalesce and build on what seem to be best practices and innovative, successful approaches. Countries in LCR could seize this opportunity to provide momentum to their rural development agenda and, as a priority, look towards implementation with a sense of urgency. The Bank could contribute to a partnership that would offer renewed commitment and support for action on the ground. In addition, it could contribute enhanced implementation capacity and more accurate and specific analytical work to deepen the reciprocal understanding around rural development issues.

Performance indicators and monitoring

Monitoring and evaluation indicators need to be country-specific. In all operations and on a country basis, the Bank will develop simple but effective monitoring and evaluation systems adapted from International Development Goals (IDG) on which international consensus already exists. While we should maintain flexibility in implementation and admit that trial and error will still be necessary as part of the learning process, a minimum set of robust indicators that are reliable, user-friendly and cost-effective will be developed. Indicators should be built on the basis of the level of progress achieved by each country and the nature of the different programs being supported, so as to increase their relevance and realism. Internally, key indicators to be monitored in order to measure effectiveness in the implementation of the strategy would be:

- treatment of rural issues in CAS/PRSPs as regularly evaluated by RDV;
- reversal of the present negative trend in lending;

- revival in the preparation of sector work through the inclusion in work programs of key studies and analytical work in all countries;
- quality of the portfolio in terms of:
- quality at entry and effectiveness of supervision as evaluated by QAG
- meeting the regional indicators with respect to risks, realism and pro-activity
- delivery and quality of the work program; and
- cross-sectoriality of task teams in terms of participation of other sector staff in project/ESW preparation and supervision.

1. Introduction

Context and approach. This Regional Action Plan for Rural Development is an input to the Bank-wide revision of Vision to Action. The central objective of the regional Action Plan is to reduce rural poverty and promote broad-based growth in the context of the sustainable management of natural resources. The approach emphasizes the holistic nature of rural development, as opposed to focus on a single sector—agriculture, and the urgency to go beyond vision into action. It proposes a differentiated rural development strategy directed at different population groups. It conveys the message that while the rural sector confronts many challenges, it also presents many opportunities that make it potentially attractive to investors and to rural dwellers if the right mix of policies, institutions and support programs can be put in place. Appendix 1 presents what the Bank Rural Network described as the holistic vision of rural well-being in the “Vision to Action” paper.

Purpose and focus. At the regional level, the purpose of this paper is to make the case that the region cannot succeed in its poverty reduction efforts without renewed focus on rural development issues and the establishment of a framework for revitalizing the Bank’s work in this sector. The regional document is action-oriented, specifies strategic priorities for the region and strengthens new cross-network partnerships and synergies. It is expected to have “buy-in” from regional management, especially from Country Management Units (CMU), and from stakeholders in client countries. It outlines changes required in the Bank’s operational procedures and organization. It is expected that this regional strategy will serve to guide country-level discussions to forge consensus on country priorities and sector strategies. Similarly, monitoring systems and outcome indicators would need to be defined at the country level to make them more relevant to specific circumstances.

A strategic opportunity for the region and the Bank. This paper shows that in aggregate terms, poverty and inequality have remained at very high levels and that despite progress made after the mid-90s, the region is only back to the poverty levels observed in 1986. This occurred while major macro and trade reforms were undertaken and despite the region’s rich natural resource endowment. The region is at a crossroads. Globalization, urbanization, decentralization and democratization present tremendous challenges and opportunities to the region. At this critical juncture, the Bank can help the region seize this strategic opportunity by building on valuable lessons of rural development learned at great cost and by developing internal and external partnerships. A holistic but differentiated rural development strategy and Action Plan can make the difference in making rural areas attractive over time to rural inhabitants and to private investment and generate dynamic rural growth, employment and sustainable poverty reduction.

A roadmap of the paper. The paper is organized along the following sections:

- *Section one sets the context and asks what happened in these past fifteen years.* It recognizes that macro stability and the opening to global trade are necessary but not sufficient conditions for reducing old structural barriers in the capacity of the rural poor to access opportunities and for reducing inequalities. These reforms could not effectively deal on their own with the complex and differentiated nature of rural economies in LCR.
- *Section two asks why the performance was meager and puts forward critical missing components of past approach.* It suggests that what was missing was a micro agenda focused on reducing the sharp inequalities in access to services and opportunities, ownership of assets, and on improving the competitive and efficient functioning of factor and goods markets.
- *Section three takes stock and asks why rural development is still of strategic relevance today.* It assesses past experiences and looks at today’s main challenges and opportunities in LCR. It then argues that rural development is a critical element of a poverty reduction and growth strategy.
- *Section four argues that the Bank can help the region do better and proposes a number of strategic thrusts and an Action Plan.* This Rural Action Plan builds on hard-earned lessons of generations of experience in rural development and focuses on how best to address the major causes of widespread rural poverty in LCR, and how to remove the barriers to sustainable growth.
- *Section five focuses on implementation arrangements and on how to achieve synergy.* It presents some concrete proposals on how to build cross-network partnerships, client ownership and synergism.

What we mean by “rural” and the basic statistics underlying this paper are presented in box 1.1, and tables 1.1-1.4 below on LCR.

Box 1.1 What We Mean by “Rural” in this Action Plan

The term “rural” is obvious to the layperson, but its administrative/operational definition varies by country, and within the Bank. For example, census criteria take varying levels of cut-off points between rural and urban. In Mexico the cut-off point is a locality with more or less than 2,500 inhabitants. In other countries the cut-off point may vary between 5,000 to 10,000. Throughout the Bank, there is no consistent definition of “rural,” as the Bank accepts each country’s definition.

However, beyond the census definition, the concept of “rural” has been taking a broader form that in many cases blurs the traditional urban-rural divide. The concept of “rural” expands over an entire territory or a region. In that respect a common element of this concept is that “rural” is a multi-dimensional concept which tries to capture the idea of all activities in the rural space including agriculture, agro-business, rural education, infrastructure in villages and secondary towns, financial services, municipal development, etc. As a consequence, interventions at macro and sectoral levels with a major impact on rural factor and output markets are also relevant to this Action Plan. This broad view of “rural” is consistent with the holistic approach of the *Vision to Action*, and of the Comprehensive Development Framework. It is also in line with the concept of the “*Nueva Ruralidad*” put forward by IICA in its recent strategy paper. Therefore, the plan encompasses activities well beyond those normally handled by the “rural family” and calls for concerted actions from the various networks, as we will see in Sections Four and Five.

Table 1.1: Population in LCR: Selected estimates

<i>Item</i>	<i>Units</i>	<i>1986</i>	<i>1996</i>	<i>2000</i>	<i>2020</i>	<i>2030</i>
Total population	million	407	486	519	665	726
Urban	million	281	360	391	540	604
	%	69	74	75	81	83
Rural	million	126	126	128	126	121
	%	31	26	25	19	17

Source. See Appendix 2. All figures rounded.

Table 1.2 Poverty in LCR: Selected estimates in millions and in percentages

<i>Year</i>	<i>1986</i>	<i>1992</i>	<i>1998</i>
Poor	136	182	174
Extreme Poor	59	91	81
Urban Poor	72	104	103
Rural Poor	65	78	71
Extreme Urban Poor	27	44	42
Extreme Rural Poor	32	48	40
Poor	34	40	35
Extreme Poor	15	20	16
Urban Poor as a percent of Urban Population	25	32	28
Rural Poor as a Percent of Rural Population	51	61	56
Extreme Urban Poor as percent of Urban Population	10	13	11
Extreme Rural Poor as a Percent of Rural Population	25	37	31

Source: Poverty in Latin America: Trends (1986-98) and determinants, by Quentin Wodon, Rodrigo Castro-Fernandez, Kihoon Lee, Gladys Lopez-Acevedo, Corrinne Siaens, Carlos Sobrado, and Jean-Philippe Tre, World Bank, April 11, 2001. See Appendix 2 for more details. All figures rounded. Poverty level: Poor is below \$2.0/day; extreme poor is below \$1.0/day

Table 1.3: Selected measures of income and asset inequality

<i>Countries</i>	<i>Income Inequality: Gini coefficient 1986</i>	<i>Income Inequality: Gini coefficient 1996</i>	<i>Asset Inequality: Gini index for land distribution 1980-90s</i>
Argentina	0.50	0.53	0.85
Brazil	0.59	0.61	0.85
Colombia	0.57	0.56	0.77
Honduras	0.59	0.55	0.78
Mexico	0.47	0.52	0.62
Venezuela	0.50	0.50	0.90

See Appendix 2.

Table 1.4: Rural and urban social and economic indicators in LCR: selected estimates

<i>Item</i>	<i>Unit</i>	<i>Rural</i>	<i>Urban</i>
Infant mortality	Per 1000 live births	57.2	43.5
Child mortality	Per 1000 live births	73.9	52.5
Total fertility	No. of births/woman	4.4	2.8
Adolescent fertility	No. of births/1000 women age 15-19	124.1	90.7
Using modern contraception	Percent of women	55.7	66.9
Immunization	% of children 12-23 months	54.6	70.3
School enrollment	% of 6-11 yrs old	88.0	95.4
School enrollment	% of 12-14 yrs old	78.3	92.7
School enrollment	% of 15-17 yrs old	47.1	75.1
Access to electricity	Wtd aver. %, 1996	69.9	98.2
Access to pot. Water	Wtd aver. %, 1996	51.8	92.4

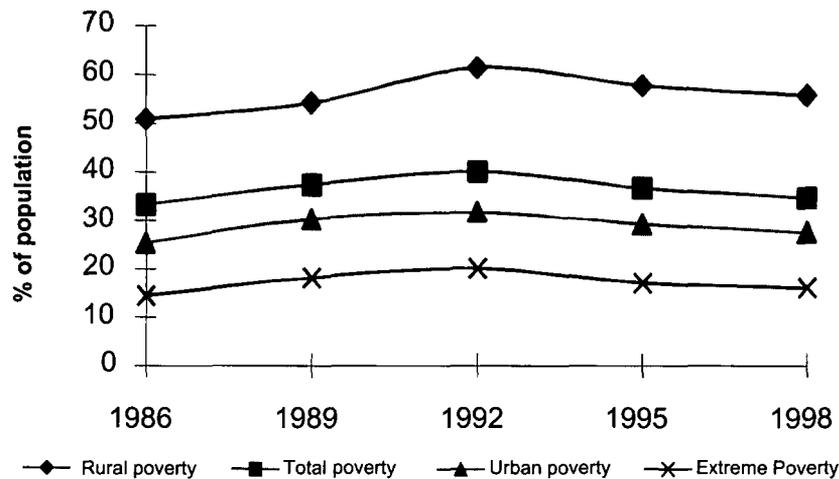
Sources: Poverty, Urban-Rural Differentials, and Migration in Latin America, by Quentin Wodon, Ishan Ajwad, V. Malkin, C. Siaens, and G. González Konig (2000); and Infrastructure reform and the poor, by Quentin Wodon and Ishan Ajwad (2000).

2. What Happened?

Meager payoffs. Poverty and inequality remain pervasive and despite progress made after the mid-1990s, the region is only back to the poverty levels observed in 1986.

An urbanized region with high levels of poverty

Figure 2.1 Poverty in Latin America & the Caribbean



LCR is a highly urbanized region. Of its estimated 519 million inhabitants for the year 2000, 391 are urban and 128 are rural. Projections for the year 2020 show that while the urbanization trend will continue and the share of the rural population will decline, the absolute numbers of people living in rural areas will remain roughly the same. Since 1986, rural and urban poverty has increased in terms of incidence and of absolute numbers. In 1998 about one-third of the population was poor and one-sixth was extremely poor. This represents 174 million poor people, of which 81 million live in extreme poverty (figure 2.1). However, this trend needs to be divided in two phases. While poverty has increased from 1986 until about 1992, the share of the population in poverty has started to decrease since the mid-1990s, and it is now back to its level of the mid-1980s. But due to population growth, the number of the poor has increased over the past fifteen years. Poverty incidence rose from around 34 percent in 1986 to 35 percent in 1998. Rural poverty is high, at 56 percent, and urban poverty at 28 percent; extreme poverty is at 31 and 11 percent, respectively (see table 1.2). The concentration of rural poverty for some groups or regions makes a further worsening of rural poverty politically dangerous in terms of: (a) ethnicity, e.g., indigenous peoples, and Afro-Latin Americans; (b) some sub-regions, e.g., Northeast Brazil, Southern Mexico; and (c) gender in some countries, e.g., female-headed households in marginal areas.

Figure 2.2a Income inequality, 1986 and 1996

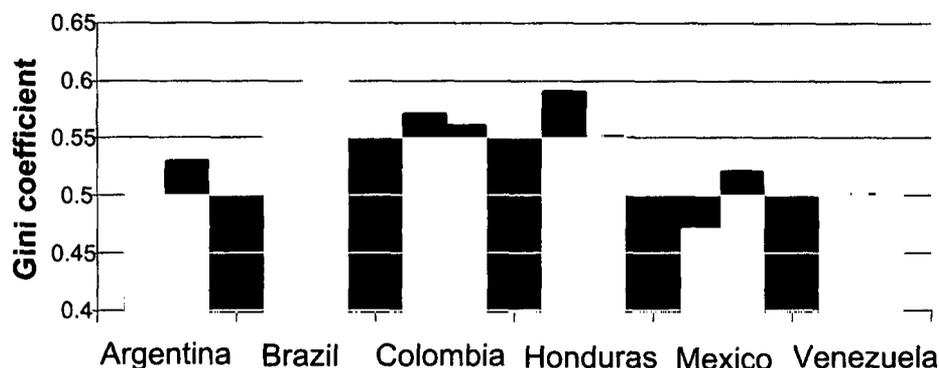
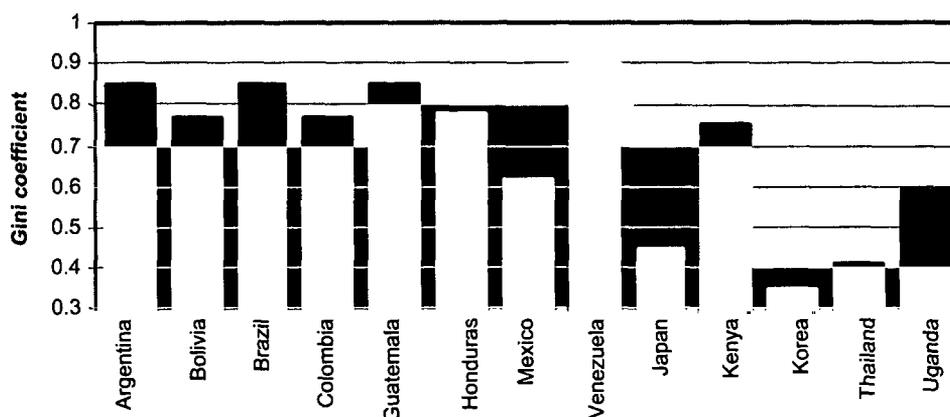


Figure 2.2b Land inequality, around 1980



High and rising inequality has been a root cause of poverty. LCR is characterized by high inequality (figure 2.2). Income inequality in major countries has risen from 1986 to 1996. For example, Gini coefficients for Brazil rose from 0.59 to 0.61 over that period; for Mexico, from 0.47 to 0.52; and for Chile, from 0.44-0.58.⁶ The Gini index for land concentration is even higher, e.g., 0.8 for Brazil, 0.9 for Peru, in comparison to 0.3 in the Republic of Korea, and 0.4 in Taiwan, Republic of China. Indeed, the seven countries with the most severe land concentrations are all in LCR. Inequality over centuries is responsible for the concentration of poor people in marginal, risk-prone areas. Inequality also has other perverse effects:

- *High inequality limits the elasticity of poverty reduction to growth.* The elasticity of poverty reduction to growth in LCR has been estimated at one percent and in the developing world, two percent. In Brazil, where inequality is one of the highest, it is less than the low LCR average, at about 0.7 percent.⁷ One major reason for this lower elasticity is that the structure of demand is import-intensive, which favors imports instead of domestic production in which smallholders can compete.

⁶ Poverty and policy in Latin America and the Caribbean, by Quentin Wodon, with contributions from Robert Ayres, Matias Barenstein, Norman Hicks, Kiboon Lee, William Maloney, Pia Peeters, Corinne Siaens, and Schlomo Yitzhaki, World Bank Technical Paper no. 467, World Bank, Washington, D.C., 2000; Table 2.1-2.4. The estimate for Chile is considered suspect because of the narrow data base.

⁷ Source: Country Assistance Strategy for The Federative Republic of Brazil, World Bank, March 6, 2000; pp 6.

- *High inequality may have limited growth itself.* The negative relationship between inequality and growth has been amply demonstrated, contrary to the assertion of the Kuznets “U-shaped” curve (1955).⁸ Annual per capita GDP growth in the 1990s in the region fell far short of the 4 percent average in East Asia.⁹ In these East Asian economies, land reform had redistributed land ownership rights and imposed ceilings of only a few hectares. Governments also undertook a series of other measures to level the playing field and promote the competitiveness of small farms as well as intensive investments in human capital.¹⁰ Although East Asia was hit by the 1997 financial crisis, its recovery since 1999 has been strong (GDP growth of 5-6.5 percent in 1999).¹¹ In Latin America, past land reform efforts did not succeed in reducing high inequality in land distribution, and price policies favored large farms.
- *High inequalities in access to basic services undermine human capital development.* Key aspects of human capital development reflect the above disparities. Despite achievements in education—85 percent of primary school-age children are enrolled—education is not fulfilling its potential to improve social mobility. The rural poor and indigenous peoples are at an extreme disadvantage relative to other groups. Even for those who have access, however, the quality and relevance of schooling have a long way to go. The gap in school performance and competitiveness between the LCR region and OECD countries is also growing.¹² Improving coverage and quality of basic health services especially in remote areas where indigenous peoples predominate has been a dominant goal of the health system. The ongoing Mexico Health Project exemplifies the difficulties and the significant progress possible.¹³ The poor, rural and urban, also suffer from widespread malnutrition. An estimated 60 million people in LCR suffer from food insecurity; 6 million of these being children (mid-1990s). In cities, unbalanced diets mainly among poor adults have increased their vulnerability to chronic diseases related to diets.¹⁴

At the macro level: a decade of wide-ranging reforms with occasional major economic crises. During the second half of the 1980s and the beginning of the 1990s, most countries in the region made a radical departure from heavy state intervention in prices and markets towards private sector-led models of development. They reduced barriers to foreign competition in domestic markets and accelerated the process of integration with the global economy. Substantial trade liberalization was a hallmark of these economy-wide reforms. The weighted average rate of tariff and para-tariff charges for LCR fell from 40 percent in the 1980s to around 15 percent in the 1990s, comparable to the levels prevailing in the East Asian Newly Industrializing Countries.¹⁵ For most countries, the average annual rate of inflation (excluding Brazil) also fell from about 300 percent (1980-1990) to about 31 percent in 1991-96.¹⁶ These were major achievements. Yet growth remained mediocre as GDP/capita growth was well below 2 percent per annum. These aggregate figures hide important variability. Where significant economic growth could be sustained (Chile), important gains could be achieved towards poverty reduction. On the other hand, some of the

⁸ The “U-shaped curve” asserts that in the early stages of development, growth and capital accumulation are entirely consistent with rising inequality. Sources: Beyond trade-offs: Market reform and equitable growth in Latin America, by Nancy Birdsall, Carol Graham, Richard H. Sabot, editors, Inter-American Development Bank, Brookings Institution Press, 1998. Chapter six on Inequality-reducing growth in agriculture: a market-friendly policy agenda, by Michael R. Carter and Jonathan Coles, pp 147-178; pp 153-154 on the Kuznets curve.

⁹ Source: Securing our future in a global economy, by David de Ferranti, Guillermo E. Perry, Indermit S. Gill, and Luis Servén. World Bank Latin American and Caribbean Studies, the World Bank, 2000, pp 2, Fig 1.1.

¹⁰ Source: Rural Asia: Beyond the Green Revolution, Asian Development Bank, 2000, chapter 2.

¹¹ Source: East Asia: Recovery and Beyond, the World Bank, Washington, D.C., 2000; Executive Summary, pp 3.

¹² Source: Educational change in Latin America and the Caribbean, the World Bank, Latin America and the Caribbean, Social and Human Development, 2000; Executive summary, pp10-11.

¹³ Source: Health extension services in Mexico: current strategies and programs, by the Secretaria de Salud, English Edition 2000.

¹⁴ Source: A 2020 vision for food, agriculture, and the environment in Latin America, edited by James L. Garrett, International Food Policy Research Institute, October 1995, pp 1, 6.

¹⁵ Source: The Long March: A reform agenda for Latin America and the Caribbean in the next decade, by Shahid Javed Burki, and Guillermo Perry, World Bank Latin American and Caribbean Series, 1997, Fig. 2.2.

¹⁶ Source: The Long March: A reform agenda for Latin America and the Caribbean in the next decade, by Shahid Javed Burki, and Guillermo Perry, World Bank Latin American and Caribbean Series, 1997, Table 1.1, pp 3.

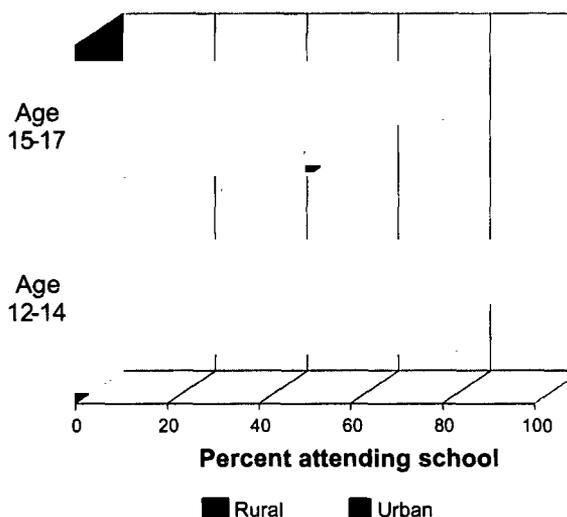
large countries were not exempt from major economic crises, such as Brazil and Argentina in the late 1980s and 1990s, and Mexico in 1994, which caused a major surge in poverty and affected regional figures.

At the sectoral level: a dualistic response. Agricultural growth averaged 3 percent per annum during the 1990s but the growth was concentrated and exclusive.¹⁷ In agriculture, the gainers of macro reforms and trade liberalization have been producers driven by export markets, especially of non-traditional exports of fruits and vegetables. In many cases such growth did not trickle down or was not sufficiently sustained to have an impact on poverty and even less on inequality. Import-competing commodities did not fare well and were therefore subject to protectionist measures in a number of countries. This is a politically sensitive issue as direct protection tried to shield smallholders producing basic food crops but it maintained inefficient cropping patterns with little comparative advantage. Moreover, by inducing higher prices it mostly affected the net food consumers, including most of the rural poor. Most smallholders are trapped in low-productivity agriculture that cannot generate enough surplus to enable them to invest and take risks. Since agriculture alone cannot sustain a decent livelihood for most, and in the context of limited access to basic services, infrastructure, and opportunities, migration has become the valve to escape poverty.

Rural areas are severely disadvantaged in other aspects as well. In terms of economic and social indicators, rural areas are worse than urban areas. However, rates of urban poverty, income disparities and violence are some of the highest in the world.¹⁸ The access to basic services and infrastructure is much more limited in rural areas. For example, the LCR weighted average for infant mortality rates is 57.2/1000 live births in rural versus 43.5/1000 urban; for child mortality rate (children age one to five), the rates are 73.9/1000 rural versus 52.5/1000 urban. Rural education is deficient relative to urban education—in LCR countries, 21% fewer rural children attend school than do urban children.¹⁹ This says nothing of education quality. Teachers who live outside poor rural communities travel during the week to teach and are often absent. School enrollment is much lower for rural areas in all age categories (Figure 2.3). Child labor in the 6-11 age category is 7.4 percent rural versus 1.4 percent urban. LCR's (12 countries) weighted access to electricity in 1996 was 69.9 percent rural versus 98.2 urban; for potable water, the respective rates were 51.8 percent rural versus 92.4 urban. High inequity is a major cause of rural poverty and high rural-urban migration. See Tables 1.2 - 1.4 and Appendix 2 for more detailed statistics on poverty, inequality and comparative social and economic indicators.

Migration is a valve to escape extreme poverty but it exacerbates urban poverty. Low labor productivity and lack of basic services will continue to represent a strong “push factor” in many rural areas. Since 75 percent of the LCR population is now urban, the absolute number of poor is larger in urban areas than in rural areas; but the incidence of poverty is much higher in rural areas (see table 1.2). It is fair to say that a person migrating from rural to urban areas faces a lower probability of being poor at his place of destination than at his place of origin. However, while urbanization contributes to poverty reduction over time, there are limits in the short term to the capacity of large

Figure 2.3 School enrollment in Latin America & the Caribbean, rural vs. urban



¹⁷ Source: Agricultural strategy for Latin America and the Caribbean, Inter-American Development Bank, December 2000. The data also appears in FAOSTAT, and is used by IFPRI.

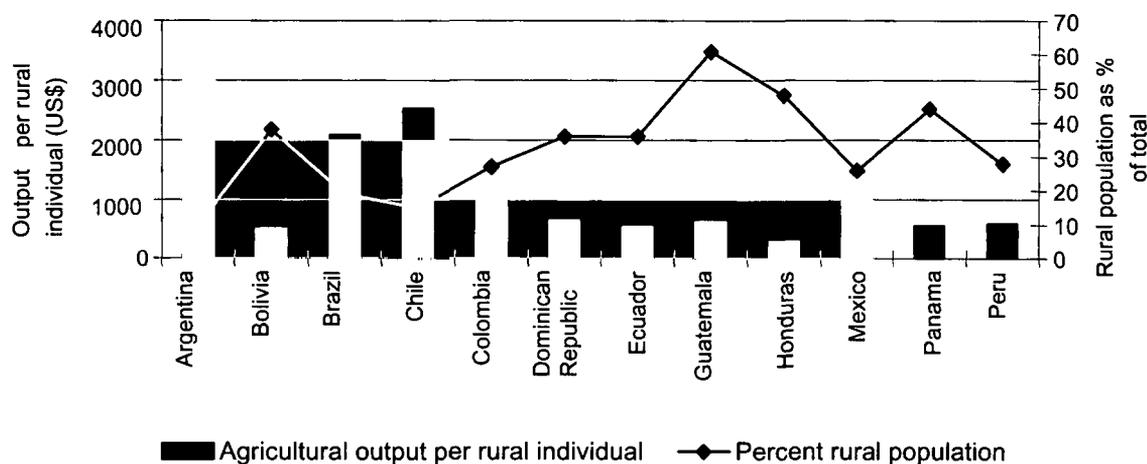
¹⁸ Source: Urban sector strategy paper of LCSFP, FY 2000. (dated January 6, 2000), Section B.

¹⁹ Children age 12-14 and 15-17, weighted for country but not for number of children in the two age groups.

towns to absorb an increasing inflow of uneducated people. An estimated 20-25 percent of the region's population lives in slums.²⁰ The urban poor may have better access than the rural poor to basic infrastructure and services, but their well-being is undermined by rising crime and violence. The worsening of urban poverty shows that urbanization per se cannot be seen as a solution to poverty if it is not the result of real access to better opportunities. More analysis should be done on the cost effectiveness of public intervention in urban and rural areas in terms of delivering basic services. While there may be economies of scale due to higher population densities in towns, expectations are lower in rural areas. A regional approach to rural development may, however, also achieve economies of scale while maintaining a focus on rural areas, promoting local opportunities and employment and preserving existing social capital.

Low labor productivity in much of smallholder agriculture. Although many LCR countries grow similar agricultural products, efficiency varies widely among countries. Since agricultural exports are a significant part of total exports, efficiency is a key factor in international competitiveness. Agricultural output per rural population (Ap.) is an imperfect measure of agricultural efficiency—countries that are more dependent on large labor forces in agriculture might appear to have inefficient production (figure 2.4). Even these imperfections are insufficient to explain the difference between \$280 Ap. in Honduras and \$3,550 Ap. in Argentina. The wide divergence between the contribution of agriculture to employment and its contribution to GDP is evidence of low labor productivity. For the region as a whole, the share of AGDP (primary agriculture excluding agro-industry) is below 10.0 percent (1996). There are, however, wide differences: in the larger, more urbanized economies, the share is around 5-8 percent as in Argentina, Brazil and Mexico, while in the smaller and poorer economies, it is around 24-37 percent as in Honduras, Nicaragua, Guyana and Haiti. In all cases, the participation of agriculture in GDP is much lower than its contribution to employment. For example, in Mexico, the sector contributes to 20 percent of the total labor force, but only 5.0 percent to GDP (1999); in Central America—57 percent of labor force versus 12-20 percent of GDP, and Paraguay—45 percent of employment versus 27 percent of GDP. This productivity gap reveals low returns to primary factors and modest investment levels.

Figure 2.4 Rural efficiency and population



²⁰ Source: Urban sector strategy paper of LCSFP, FY 2000. (dated January 6, 2000), para 32-33

3. Why Such Meager Results?

The broad reforms left many structural distortions and regional disparities untouched. Sorely missing was the micro agenda for improving the competitive functioning of factor and goods markets, and for reducing the high inequalities. The private sector's perception of the risk of operating in rural areas remained high.

Macro stabilization and trade liberalization were necessary but not sufficient. The focus of the macro reforms was right on restoring fiscal and monetary discipline that greatly contributed to reduced inflation rates and fiscal deficits. Reduction of trade tariffs promoted the integration of LCR economies in world markets, competitiveness and growth, e.g., the spectacular growth in non-traditional horticultural exports. In general, these reforms helped put in place a policy framework more conducive to growth and private sector involvement. These are positive developments. However, a stable environment proved to be necessary but not sufficient, as the rural sector remained relatively disconnected from the rest of the economy and the macro and micro agendas followed parallel tracks. In terms of its contribution to rural poverty, the structure of growth is as important as growth figures per se. In many cases agricultural growth was concentrated in the commercial sector and did not trickle down. By their very nature, macro reforms could not address the heterogeneity of the rural sector, the long history of in-egalitarian development and the deep-seated structural problems that inhibit efficient and broad-based supply response from millions of smallholders and rural entrepreneurs.²¹ Recent LCR experience shows that the positive impact of macro and trade reforms on promoting high and equitable growth largely benefiting the poor is limited when not accompanied by micro reforms. Such "second generation" reforms should strive at improving the efficiency and capacity of the local economy and institutional structures, fostering the competitive functioning of local markets, inducing a change of behaviors and facilitating access of the rural poor to economic assets, services, technology and infrastructure.

Macro reform and sectoral policies did not always generate a supportive environment for agriculture. In some countries, for example Mexico and Argentina, macro reform did not bring stability or a supportive environment for agriculture until much later. Until 1994, Mexican agriculture suffered from high inflation and overvalued exchange rates, which acted as a deterrent to supply response. Moreover, in some cases, trade liberalization reduced protection at a time when world commodity prices were at historic lows, e.g., corn, wheat and coffee, and when many producers of import substitutes were (and are still) not competitive in domestic urban markets. Some countries also implemented explicit or implicit taxation policies towards the sector, through exchange rate regimes, industrial protection or direct measures such as taxation of export commodities (with strong comparative advantage) and direct protection of import-substituting food (with little comparative advantage). These protection and taxation patterns were highly inefficient. In a number of countries the incentive framework for agriculture remained relatively unfriendly, with negative protection rates and negative real prices to producers for most crops. In the context of a liberalized and open environment, these elements point to an implicit taxation of agriculture that may be generated by inefficient marketing channels, high transaction costs, unaccounted margins and concentration. There is a need for more analytical work that would enhance knowledge of the supply response determinants of the rural sector and the macro-micro linkages which, by nature, need to be adapted to each country's specific historical and structural factors.

Government programs and subsidies may have skewed incentives. Many governments used subsidy programs to address poverty and compensate for taxation. Some programs had perverse effects. Subsidized directed credit through parastatals not only was highly inefficient in terms of its fiscal cost, delinquency rates and outreach capacity, but it crowded out and inhibited the development of local self-sustained savings and loan initiatives. Subsidies for investment and equipment are difficult to target and bear the risk of concentrating towards medium and large commercial farmers. This also drives land prices above the capitalized value of farm profits, induces

²¹ Source: Sources: Rural Poverty in Latin America, edited by Ramon Lopez, Professor, Department of Agricultural and Resource Economics, University of Maryland, and Alberto Valdes, Agricultural Advisor, World Bank, Washington DC, Macmillan Press Ltd, Great Britain, 2000, St. Martin's Press, LLC, United States, 2000, pp 2. Beyond Trade-offs: Market reform and equitable growth in Latin America, Nancy Birdsall, Carol Graham, Richard H. Sabot, editors, Inter-American Development Bank, Brookings Institution Press, 1998, pp 3.

concentration of land ownership and makes access to land by the poor more difficult (Colombia). Moreover, measures to improve productivity should be more closely associated with competitiveness factors as subsidies may skew the incentive system of the various crops and drive the supply response towards the signals provided by the subsidies rather than the markets.

Access to international markets remains limited. Market access to rich countries for the goods and services from developing countries remained protected, especially in agricultural commodities. World trade in agriculture grew by only 1.8 percent per year between 1985-1994 while trade in manufactures expanded by 5.8 percent during the same period.²² As long as the markets of developed countries remain closed or distorted, the agricultural growth required to lift people out of poverty in developing countries will be severely constrained. LCR countries would benefit by promoting a more active agenda aimed at removing barriers and distortions in developed countries' agricultural markets, through multilateral trade negotiations.

High inequality prevents access to economic assets The rural poor have limited access to potentially lucrative economic assets, as well as to services, infrastructure and markets. Factor and goods markets remain segmented, shallow and non-competitive, such as land and finance. For example, land markets are not efficient, as shown by the high Gini coefficients. Rigidities in formal labor markets undermine employment growth and push the poor into less lucrative, informal labor markets. The development of rural finance is undermined by the high perception of risks of the rural economy and of the poor. With market orientation and fiscal retrenchment, government withdrawal left a void in the delivery of public goods and services in rural areas. This vacuum was filled by private intermediaries who, while providing a critical link with the markets for small dispersed farmers, also established monopolistic practices and rents. The high inequalities characteristic of LCR hinder the poor's efforts at market integration. The high human cost of this negative impact is stark among indigenous peoples and Afro-Latin Americans who are the poor among the poor. Many have been forced to live on the fringes of growing cities and in remote, risk-prone rural areas. Poverty is much higher and more severe among these groups in, for example, Bolivia, Guatemala, Mexico, Peru, Brazil and along the Pacific coast of Colombia.²³

Community participation approaches helped build social capital and deliver micro-projects but need to build bridges beyond the community There have been projects in many sectors, e.g., soil and natural resource management, delivery of basic services, land reform and land administration, education, health and infrastructure, designed on the participatory, community empowerment principles which are considered best practice throughout the Bank. While these projects have largely been successful on their own merits, there is a need to ensure institutional sustainability and to better link these community-driven projects to local governments, decentralization strategies and the rest of the economy. This approach would also need to promote producers' organizations and provide the critical linkages to the markets and integrated supply chains, where the private sector would play an increasing role in the development of the family farms sector. There are few examples of such development, e.g., the organization of indigenous peoples producing broccoli and snow peas in the Guatemalan Altiplano. But these cases are too rare.

Weak property rights undermine the security and fungibility of assets. Poverty considerations and strategies would benefit if they were looked at not only from the perspective of available income but also of available assets. It would focus policy makers on the importance of property rights and a credible regulatory framework that would make smallholders' assets more secure and fungible. A significant proportion of small and medium landowners lacks legal titles to their land. Land tenure insecurity in turn reduces the collateral value of their land, limits their access to finance, and is a major contributor to low productivity and inefficiencies. Property rights and an adequate regulatory framework are the basis of functioning markets. Poor farmers' small and dispersed plots ranging from one to five hectares without a legally recognized title, do not permit them to consolidate holdings or to capitalize their values, nor do they provide the required security to invest in them. The same could be said for crop inventories, as property rights could protect not only ownership but also transactions, and allow farmers to sell their crop at the best moment (including future crops). Secure assets can represent an important element in reducing vulnerability and as part of a risk management strategy.

Constraints to productivity on women farmers are worse. With migration, women are becoming more important in farming although national statistics underestimate their participation. However, the constraints on them are worse

²² Source: World Development Report 2000/2001: Attacking poverty. Oxford University Press for the World Bank; pp 180.

²³ Source: *Las poblaciones indígenas y la pobreza en America Latina Estudio empirico*, (get specific references).

than on men. See Appendix 5 on gender dimensions to development. There are several reasons that undermine women's on-farm productivity. Poor access to land and land tenure insecurity is a widespread problem but the insecurity for women is worse, as noted above. Gender discrimination (or bias in favor of heads of households, generally males) in the first wave of land reforms (in the 60s and 70s) has resulted in many women not receiving titles. Inflexible gender roles lead to inefficient labor allocation. Their access to extension is often poorer. Female illiteracy rates are higher than those among men, for example among indigenous peoples. Fertility rates for rural women are much higher than for urban women. This saddles them with a high dependency ratio. See table 1.4 comparing selected rural and urban indicators of well-being. The vulnerability of rural women is further exacerbated by domestic violence, higher levels of which tend to be associated with lower socioeconomic levels, higher unemployment and underemployment.

Youth –at risk, a dramatic example of the vicious circle of poverty and close rural-urban links. The typical profile of youth –at risk (generally age 12 to 24) is well known: poor quality of education and high rates of attrition from school; lack of employment opportunities except in poorly paid, exploitative settings; poor reproductive health and high rates of teenage pregnancy; unstable home environments, poor parenting, lack of supervision and guidance; and high levels of crime, violence, including domestic violence and abuse.²⁴ A subset of this complex problem, youth violence, has increased dramatically. For example, Mexico City had no gangs in the 1960s, although they did exist in rural areas. By the 1990s, Mexico City and other major provincial centers were plagued with them. They imported the Los Angeles-style *cholo* Latino gang.²⁵ Adolescents (age 10-19) represent some 22 percent of the population in the region, varying from 17 percent in Uruguay to 26 percent in El Salvador.²⁶ In comparison, it is nearly 14 percent in North America. The roots of this problem are complex, but poverty, drugs, rapid urbanization and migration (including return of illegal migrants from the United States) are core causes. The manifestation of these youth problems varies between rural and urban, and between gender. In rural Brazil, for example, a major problem for such youth is child labor in agriculture and mining (95 percent of boys in this risk category), and in domestic work (81 percent of the young girls who work).²⁷ Youth violence, whether rural and urban, typically forces women to be “invisible” in public places, curtailing their access to various opportunities such as education, employment and community participation. The severe and growing problem of youth –at risk is a somber reminder of the urgency of breaking the vicious circle of poverty, rural and urban.

The perception of risk by the private sector remains high. The development of the rural sector cannot happen without a much stronger involvement of the private sector. Therefore, the perception of potential and risks associated with the rural sector is a key factor in the incentive to invest. A more positive attitude towards the sector has been undermined so far by: (i) high transaction costs, both in terms of physical access and the cost of doing business generated by the local bureaucracy; (ii) deficient functioning of the legal system and of property rights that would permit secure transactions and better use of collateral; (iii) low level of education and technical assistance; (iv) low level of organization which limits the potential for economies of scale, quality and standards of production; and (v) government intervention which distorts market price signals. There is thus an important area of public intervention that could address the externalities and the barriers that prevent stronger private sector involvement and partnership.

The Rural Non-Farm Employment (RNFE), an important sector, is also dualistic. The sharp inequalities of the farm sector are repeated in RNFE. The average Latin American share of the rural income coming from the non-farm economy is 40 percent (similar to averages in Asia and Africa) and represents about 35 percent of rural employment.²⁸ However, the participation of the rich and poor differs markedly. The rich are relatively less dependent on RNFE but earn more; the poor are relatively more dependent than the rich, but they earn less—the so-

²⁴ Source: Youth-at-risk in Jamaica: a Note, by Lorraine Blank, December 2000, pp 1.

²⁵ Youth Gangs and Violence in Latin America and the Caribbean: A Literature Survey, by Dennis Rogers, Latin America and Caribbean region, LCR Sustainable Development Working Paper No. 4, 19817, August 1999; pp 11.

²⁶ Sources: Youth Violence in Latin America and the Caribbean: Costs, causes, and interventions, by Caroline Moser and Bernice van Bronkhorst, LCR Sustainable Development Working Paper no. 3, 19816, August 1999; pp 1.

²⁷ Source: Gender Note on Child Labor and Street Children in Brazil, draft, by Emily Gustafsson-Wright and Hnin-Hnin Pyne, March 2001, World Bank, LCR Human Development; pp 6-8.

²⁸ Source: Rural nonfarm employment and incomes in Latin America: Overview and policy implications, by Tom Reardon (Michigan State University), Julio Berdegue and German Escobar (International Farming Systems Research network (RIMISP), forthcoming in World Development, 29 (3), March 2001, pp 2, 10.

called “micro-paradox.” The rich are more specialized as they have education and access to infrastructure and dynamic markets. The poor are more diversified but are locked in “refuge RNFE activities” characterized by low productivity and low return typical of stagnant markets. This “micro-paradox” finds its parallel in the “meso-paradox.” This simply means resource-rich areas earn more from RNFE but they depend less on it. Well-endowed areas are doubly favored: from the supply side, they have the necessary infrastructure, and from the demand side, they have access to dynamic local and more distant markets. Resource-poor areas are doubly disfavored: they do not have access to the marketing infrastructure, and do not have local dynamic demand either. An important poverty subgroup with a high incidence of illiteracy—rural women—exemplifies the “micro-paradox.” The RNFE is very important for them. However, given rigid gender roles in rural areas, their low asset base and the social constraints they face, women workers tend to be concentrated in low-paid RNFE. To the extent that women tend to be left behind in high out-migration areas, their case also exemplifies the “meso-paradox.” However, the basic issue is not gender per se but the lack of assets that is in turn highly correlated with gender and ethnicity.

High vulnerability to shocks among the poor constrains their productivity. Worldwide evidence clearly shows that poor people are least able to protect themselves against shocks, market-induced and natural. When calamity strikes, they are forced to resort to coping mechanisms that undermine their struggle out of poverty. In LCR, macro and trade reforms without adequate transition programs (or safety nets) intensified their vulnerability. Such high vulnerability completes the vicious circle they are trapped in. The high level of risk and the limited options available to poor farmers to cope with income and consumption variability have induced them into low-risk/low-return investment strategies that limit their economic opportunities and contribute to keeping them in a poverty trap. Natural calamities inflict tragedies on them. The loss of their few available assets takes away years of development programs. Add to this already difficult situation the prediction that with climate change, the frequency and severity of natural disasters will increase in LCR. See Appendix 6 FAO farming systems study.

4. Taking Stock – Why is Rural Development Still Important?

LCR is at a crossroads. The rural economy will remain of strategic importance for years to come despite its declining share. But the irreversible forces of globalization and urbanization need to be harnessed to promote inclusive growth and access to opportunities through a balanced and holistic approach

What Have we Learned in Rural Development?

Need to find the right balance. This rural Action Plan argues that LCR cannot succeed in its poverty alleviation efforts without the contribution of the rural sector. However, finding the right balance is still a challenge. The development community has gone from one extreme to another, searching for the appropriate instruments and approaches to translate a holistic vision into effective actions. Too often, implementation capacity fell short of conceptual sophistication or poor policies kept good projects from bearing fruit. It suggests that the approach must be holistic but the balance between macro and micro and among different elements of the complex development agenda is critical. Sound governance through a competent and respected economic technocracy is also essential to deliver results on the ground.

The 1970s. Back in the 1970s, practitioners recognized the complexity of the process; the need for integration among many things and at many levels, in particular policies, and the delivery of public goods and services in different sectors; and the need for strong coordination at the center and for decentralization in implementation.²⁹ While Integrated Rural Development Projects were right about integration, they were wrong about the way they were implemented. IRDPs were implemented top-down, with no participation, no decentralization and in an adverse policy environment. However, there is much that we can recover from the concept of integrated rural development in the new context of decentralization, differentiation, democratization and better policy framework that characterizes most of LCR countries today.

The 1980s and part of the 1990s. In the 1980s and part of the 1990s, a leaner but less integrated approach was undertaken in LCR. The focus was on rectifying the macro policies with the expectation that it would spur higher growth and its benefits would have trickled down and addressed rural poverty issues. A stable macro environment proved, however, to be necessary but not sufficient, as the rural sector remained relatively disconnected from the rest of the economy. It was not sufficient because by their nature, the reforms did not address the extreme heterogeneity of the rural sector and its regional variations. Moreover, market-driven reforms were not likely to have the same impact on small-scale producers of domestically consumed and subsistence commodities as on commercial agriculture. In addition, the reforms did not (and probably could not) resolve decades of structural and cultural limitations in the capacity of small and poor farmers to access production factors and markets. Moreover, local interventions and micro-projects may have been managed with an excessive local focus and possibly overlooking the importance of building bridges with the rest of the economy.

The new millennium. The Bank's Comprehensive Development Framework (CDF 1998) recognizes the same complexity and the need to address it squarely. The current World Development Report (the WDR 2000/2001) categorizes the challenges in three complementary and mutually supportive areas: (a) promoting opportunity; (b) facilitating empowerment; and (c) enhancing security. The good news is that the potential for synergism is substantial. Experience shows that with a holistic approach, the whole is greater than the sum of its parts. So, although rural development is an old subject, a fundamental issue will be to find the right balance and develop the instruments to translate the holistic vision into effective actions and achieve synergy in a highly differentiated and dynamic context. How best to integrate the delivery of a complex package through adequate devolution of decision-making, is still a concern.

Sustained, broad-based rural transformation approach must be holistic but the balance between macro and micro and among different elements of the complex set is possible, despite many pitfalls. While continual trial and error

²⁹ Source: *The Assault on Poverty: Problems of rural development, education and health.* Published for the World Bank by the Johns Hopkins University Press, Baltimore and London, 1975; pp 3, 6, 30, 31, 35.

seems inevitable, some countries in East Asia have succeeded in achieving high, sustained, broad-based growth. Since 1975, they have succeeded in lifting some 370 million of people out of poverty, nearly twice the total number of poor in LCR (some 188 million in 1996). They combined equity with sustained high growth. They applied a holistic, market- and export-oriented strategy, supporting smallholder agriculture, enforcing an equitable land distribution, and building the human capital assets of the rural and urban poor. They combined a holistic vision with solid implementation capacity.

In sum, rural development can make the strategic difference. The stark contrast between the rich natural resource endowment of rural areas, the opportunities provided by the macro and trade framework and the reality of much of rural life should be a call to action. That very contrast is also grounds for optimism if the existing opportunities can be harnessed and the existing development potential can be tapped. The region and the Bank have a unique opportunity. The response to the challenges of globalization, urbanization, democratization and decentralization will trace the development path of the region for decades to come. A rural strategy anchored in worldwide lessons of experience in rural development can make the strategic difference between a shared and sustainable or an exclusive and socially destabilizing growth path.

Challenges and Opportunities

The challenges and opportunities of globalization. The challenge is to access the expanding markets of a globalizing world economy to fuel competitive and broad-based rural growth in the region in a socially and environmentally sustainable way. Globalization can be a bonanza to the competitive but it intensifies the need to integrate the rural poor, since speed of adjustment is at a premium. It opens up possibilities of direct trading with final consumers, eliminating unnecessary intermediaries and reducing transaction costs. Heretofore unknown “e-trading” opportunities may provide new avenues of work. Market expansion will increase the elasticity of supply response but will also require a considerable effort of technical assistance, incentive schemes and information, as the barrier to entry, no matter how small, may be perceived as insurmountable. Competitiveness may force production patterns to be reviewed, including those for commercial farmers who may have engaged in productive activities in response to distorted market signals or public investments.

The challenge and opportunities of urbanization. The challenge is to integrate the rural poor, leaving agriculture in a way that not only benefits the migrants themselves but also the secondary towns and cities to which they migrate. Rural-urban migration can exacerbate urban sprawl in areas already struggling with growing slums and violence. It can, however, be managed in a win-win fashion that facilitates the transition from agriculture in a way that relieves pressure from degrading soils, builds human and social capital and benefits the local economies in which migrants settle (and not necessarily the large towns). The growing connections with the off-farm economy will also eventually have beneficial effects by eroding differential returns to labor and capital across sectors. Migration flows and non-farm employment will likely continue to expand in the years ahead; it should not be resisted but rather be better understood and accompanied. The time has come to more effectively link urban and rural policies in a context where agriculture, services and infrastructure strive to create the conditions for a more integrated approach to local development. It also makes it possible to more effectively address marketing issues, and more effectively integrate labor markets, and pursue economies of scale and private sector development. In the end, reducing rural poverty will also benefit urban poverty, but addressing poverty should not be exclusive to one approach or the other.

The challenges and opportunities of democratization and decentralization. To face these challenges and opportunities, LCR has a strong basis to build on. The region is witnessing an increasing trend towards democratization and decentralization. The pace and form of the decentralization process is likely to be one of the most important factors in determining opportunities and limitations for regional development³⁰. This trend means that civil society will intensify pressures on the public body to pursue greater accountability and more egalitarian and inclusive policies. This will also profoundly modify the traditional roles of the public administration at its different sub-national levels and will force institutions to redefine themselves. In many countries the driving force of decentralization has been the political pressure to respond to an increasing number of local powers and the forging of new relationships with states/departments, municipalities and civil society, in an attempt to move away

³⁰ Source: Mexico – Institutional Coordination for Regional Sustainable Development. Raffaello Cervigni, the World Bank, April 2000

from traditional top-down patronage. This also imposes the compelling need for more effective coordination among government programs and increased transparency through more participatory approaches and better information.

The challenges and opportunities of a highly differentiated sector that requires adapted policies and programs. At the risk of over-simplifying, the sector may be divided into three distinct sub-groups, but with considerable osmosis among them:

- *Commercial farmers and rural entrepreneurs.* They still represent a minority. They are technologically advanced and competitive. They benefited from past reforms and are mostly driven by export markets. A number of them are engaged in contract farming and are able to access services and financing directly through private sector partners. They derive most of their income from agricultural activities or agro-processing; they represent the engine of agricultural growth and generate demand for wage labor. Their success shows the substantial productivity potential that exists in agriculture. These are not necessarily large farmers, which shows that the possibility to access output markets, factor markets, technology and credit may be more important than being large or small. However, the small-farm family sector may still offer the greatest potential in terms of employment and productivity increases.
- *Smallholders of low productivity in a state of transition.* They mostly produce for the local market or for subsistence. Their productivity level has not kept pace with the other sectors of the economy. Many see migration as a possible opportunity, not necessarily because they have no production potential, but because poor policies and little attention by public programs have left them without access to key markets (land, financial services, produce), basic infrastructure and education. This is also the group that has experienced increasing participation in the non-farm sector, services and transformation. Those who live in areas of substantial agriculture and RNF potential may be made more productive by enabling them to access better technology, diversify into higher-value crops or into activities facing expanding demand. Agricultural productivity, combined with a better functioning of markets, will be the key challenge for this group. It is a group in transition that will represent the key to the sector's future.
- *The severely marginalized.* These are the landless farm workers and those who live in areas of low agricultural potential (risk-prone or marginal agriculture, often high-altitude, forested and watershed areas). This group also has limited off-farm opportunities, is often a net food consumer and in most cases represents the extreme poor. While their agricultural productivity can be improved through better techniques for their specific cropping patterns (mostly non-tradable, coffee and small livestock), natural resource, market and infrastructure limitations require greater reliance on social safety nets as part of a survival strategy. Subsistence farming characterizes the economic base of about 50 million people, about 30 million of whom are indigenous, living in high altitudes, hillsides, and sub-humid drought-prone lands. The improvement of the well-being of indigenous peoples and Afro-Latin Americans must take into account their strong communal traditions and cultural values.

Why is Rural Development of Strategic Importance?

Agriculture and the rural sector will remain of strategic importance for economic, social and political reasons. The high rate of urbanization notwithstanding, the strategic importance of agriculture and the rural sector remains. While the rural sector confronts many challenges, it also presents many opportunities that make it potentially attractive to investors and to rural dwellers, if the right mix of policies, institutions and support programs can be put in place.

Agricultural growth and rural employment (both farm and non-farm) will remain of central importance to LCR economies. The contribution of agriculture remains important. Despite their modest contribution to GDP, primary agriculture accounts for a large share of the labor market: 20 percent in Mexico, 57 percent in Central America. However, when agriculture is broadly defined to include agro-industry, its share of GDP is much higher. For example, in Argentina, Chile, Brazil and Mexico (which together account for more than 70 percent of AGDP of LCR), agriculture in the broad sense accounts for around 40 percent of GDP (1996). Opportunities offered by the sector are still large and untapped. According to the International Food and Policy Research Institute (IFPRI), agro-industry in LCR can generate increases in activities three to four times higher than AGDP.³¹ See Appendix 2 on taxonomy showing the relative importance of agriculture, the rural non-farm and the rural-urban population balance in selected countries. Moreover, agriculture is a major contributor to exports and still has a great potential to expand

³¹ Source: A 2020 Vision for Food and Agriculture and the Environment in Latin America. IFPRI 1995. Washington D.C.

if international markets of developed countries could be made less distorted and closed. In the 1990s, primary agricultural exports as a percentage of total exports averaged 25 in Argentina (58 percent if one includes the processed portion as well), 17 in Chile, and 10 in Brazil. In Mexico, agricultural exports to the United States in the six years following NAFTA increased by 70 percent. Finally, recent ERS-USDA projections to 2010 point to strong international trade growth for most agricultural products. In the short term, low prices are stimulating a picking-up of the demand, the reduction of world crop inventories and a recovery of agricultural commodity prices over the medium and long term.

Rural transformation is fundamental for successful industrialization. Worldwide experience shows that high-productivity agricultural transformation has fuelled the growth of most of today's high-income industrialized countries. Urban demand for processed foods is rising. Continued high urbanization in LCR means a growing market for processed food for daily consumption, higher-value crops linked to agro-processing and downstream marketing. The rural economy has a substantial reservoir of productivity to be tapped and could greatly contribute to the development of other sectors. However, trade liberalization, while it facilitates exports, also intensifies competition from imports; hence, the urgency of removing barriers to high productivity and competitiveness, promoting investments, and private sector involvement.

Higher incidence of poverty in rural LCR. The share of the rural population is projected to fall from 25 percent (2000) to 19 percent (2020), but the absolute numbers are expected to remain roughly similar: from 128 to 126 million respectively. See table 1.1 on population estimates for LCR. Rural areas have the highest incidence of poverty (63 percent). Social and economic indicators in rural areas are low and much worse when compared to urban areas. Moreover, rural poverty disproportionately afflicts some groups. In high rural-urban migration areas, the elderly, women and children are left behind. There is also a close relationship between rural poverty and ethnicity. The majority of indigenous peoples (80 percent of some 19-34 million), found mainly in rural Mexico, Peru, Colombia, Bolivia, Ecuador and Guatemala, are poor.³² Destabilizing factors (violence, drugs, unrest) often find their origins in rural areas and there is a danger of increasing dualism in agriculture. This situation can become socially and politically unsustainable and can unleash destabilizing forces on a region already prone to political instability and violence. Ignoring this fact will only increase downstream problems in the medium term.

Rural development has an important role to play in promoting the sustainable use of natural resources. The competitiveness for the region will have to continue to draw upon the rich natural resource base, as export figures show. Moreover, LCR has about 21 percent of the world's total of potential arable land, 12 percent of its cultivated land, 46 percent of tropical forests rich in biodiversity, 31 percent of the world's fresh water and 48 percent of the developing world's total annual renewable water resources. It has a diverse and complex range of farming systems, a total of fifteen. See Appendix 6 on the FAO farming systems study. However, environmental degradation is high and is compounded by poverty which exacerbates enormous economic and social costs. Environmental (or natural resource) degradation is a problem throughout agriculture including better-endowed areas as well, e.g., soil degradation in the *Cerrados* in Brazil³³. However, the case of risk-prone areas dramatizes the vicious circle between poverty and environmental degradation, e.g., Northeast Brazil, Yucatan Peninsula, Mesoamerican hillsides from Central Mexico to Panama and the Central Andean *Altiplano*. The main linkage is through deforestation and soil degradation. There is a high correlation between rural poverty and soil erosion as most of the rural poor live in erosion-prone lands. High population growth in these marginal areas forces the poor to diminish the fallow period and pushes the agricultural frontier into forest areas and reserves. They do so for lack of natural resource management and soil-improving technologies, thus triggering further soil degradation which then reduces land productivity and further deepens poverty; hence the vicious circle.

The high social costs of widespread rural poverty—the case of illicit drugs. The high profitability of illicit drugs acts as a powerful magnet to too many rural poor. An important supply comes from areas dominated by indigenous peoples in the Andean countries of Bolivia, Colombia, Peru and some parts of Mexico. The illicit drug industry represents 5-6 percent of the three Andean countries' GDP (1996). Export earnings represent about 70 percent of legal exports. The rate of return for the supplier is 2-5 times higher than that of traditional crops, and eradication has

³² Source: Rural Poverty in Latin America and the Caribbean, By Alberto Valdes and Tom Wiens, May 30, 1996, Paper delivered at the Annual Bank Conference on Development in Latin America and the Caribbean; pp 7.

³³ Source: The FAO Farming Systems Study, chapter on Latin America and the Caribbean, section 6.1 on the Frontier Tropical Savannah System, draft November 2000. An estimated 40 million ha of the *Cerrados* have been severely degraded because of poor land management.

proved to be an elusive goal.³⁴ However, this phenomenon has severe drawbacks as many farmers live under permanent threats and insecurity while drug lords or the guerilla capture the profits. Besides, many are displaced, adding to social unrest, poverty and humanitarian issues. Thus, while drugs are certainly not the panacea for poor farmers, the poor have turned to cultivating illicit drugs because of the lack of alternative opportunities and the prevalence of institutional vacuums in many of these areas. To society at large, the scourge of drugs is a somber reminder of the disintegrating impact that widespread and unrelenting rural poverty can have on society at large. The case of illicit drugs in a region already prone to high instability and violence, where trust in officialdom is low, shows that rural poverty can undermine the social fabric far beyond rural areas.

³⁴ Source: *Illegal drugs in the Andean countries: Impact and policy options*, report no. 154004-LCR, Country Department III, Latin America and the Caribbean region, the World Bank, January 22, 1966, confidential draft, Executive summary, pp viii, 7-9.

5. How Does the Bank Propose to Improve the Region?

The Bank's objective is to help countries in LCR reduce rural poverty. For this, it proposes a strategy and an Action Plan to revitalize rural areas with a view to promoting rural well-being, including welfare and employment, both on- and off-farm. This revitalization will be achieved through increased agricultural productivity, more competitive and efficient factor and output markets, better access to assets, services and infrastructure in the context of the "rural space," social and human capital development, sustainable use of natural resources and improved risk management in the face of economic and natural shocks.

Objectives

The objective is to reduce rural poverty and promote broad-based growth in the context of the sustainable management of natural resources. Helping LCR meet these challenges is a unique opportunity for the Bank to fulfill its corporate mission. Rural poverty and inequality will remain one of the most pervasive and challenging development issues for a region on its way to development. Reducing poverty and promoting sustainable growth is one of the most compelling public goods that governments ought to deliver. In helping governments fulfill this essential role, the Bank would help trace a path for other, now less developed countries during the coming decades.

Strategic Thrust

The thrust of the strategy emphasizes the holistic nature of rural development, as opposed to focus on a single sector—agriculture. The strategy is to build on successful experiences and scale up what is working well, strengthen the missing links and work better together across networks so as to better balance the different elements of a complex package. The different components of the Action Plan are complementary and mutually reinforcing, and must be implemented in a coordinated and integrated way. The implementation strategy also recognizes the wide variations and disparities among LCR countries and the need to include differentiated approaches directed at different population groups. Finally, it stresses the urgency to go beyond vision into action.

An adequate overall macro and policy framework will remain essential. This is critical for dynamic rural development and agricultural growth. A stable macroeconomic framework and a competitive exchange-rate and trade regime determine the incentive structure within which the sector operates. It is important that price signals send the "right" messages and that government intervention does not crowd out private sector involvement or distort the allocation of production factors. Governments should pay more attention to the subsidy instruments that they use so that these are better targeted and induce beneficiaries to change their behavior, facilitate increased productivity and competitiveness or address externalities. This means a greater focus on and analysis of the incentive framework for the sector and the functioning of markets.

Need to better address rural-urban dynamics. While an important preoccupation of policy makers is to maintain rural-urban migration at manageable levels, this migration will continue. More training and education opportunities for the rural poor are important to facilitate their absorption into other sectors of the economy. There is a close synergism between agricultural and rural non-farm growth. We need to recognize that agriculture and off-farm activities are mutually dependent and complement each other in the income sources of the vast majority of smallholders. Broadening the access base and ownership, combined with increasing urbanization, can generate opportunities for higher income and employment and fuel growth and transformation. However, outright promotion of migration as a rural poverty alleviation strategy is not viable because it would exclude from a rural modernization process a large smallholder sector with growth and employment potential. For the millions who continue to remain in rural areas, the improvement of living conditions will depend on improvements on several fronts. These include intensifying smallholder agriculture and increasing productivity; providing infrastructure and services; improving access to assets such as land, education and financial services, and to markets; ensuring the sustainable management of the natural resource base on which they base their livelihoods, and providing better risk management tools.

Fostering integration through regional development and shaping a new "institutionality." A "rural space" approach based on regional development will provide the underlying vehicle to pursue sectoral integration. This requires improving the absorptive capacity of secondary towns in the context of increasing urban-rural integration and

interaction. It also calls for investments in basic infrastructure, promotion of new off-farm opportunities, better integration with labor markets, continued emphasis on community-driven development, municipal strengthening and the building of social and human capital. It also allows for better integration of environmental issues in an effort to build consensus around possible “win-win” opportunities. In this context, a new “institutionality” will need to be built around the concept of increased participation by local actors, farmers’ organizations, civil society, local governments and the private sector. This means a revision of roles where beneficiaries of government programs become clients and take leadership of regional planning and priority-setting, guide and negotiate local development processes and create the conditions for greater accountability and better governance.

Need to build bridges beyond the community level. Community participation approaches helped build social capital and proved to be an effective mechanism for delivering micro-projects and productive investments. However, to ensure institutional sustainability, there is a need to link these community-driven projects to local governments and integrate them better with existing national decentralization strategies. This approach should also build bridges with the rest of the economy, promoting producers’ organizations and providing the critical linkage to integrated supply chains, where the private sector would play an increasing role in the development of the family farms sector.

Productivity, competitiveness and increased private sector involvement are key engines of growth. Agricultural productivity, competitiveness, access to technology and markets will remain critical for many producers regardless of their size. However, in many cases the smallholder sector working for the domestic market should be subject to more attention and support in view of its potential and untapped contribution to growth and employment. Agricultural growth in LCR has not been sufficiently sustained or broad-based to contribute to any significant poverty reduction, and has essentially been generated by the export-driven commercial sector. Conditions for increased private sector involvement will need to be studied and barriers removed through private-public partnership.

Need to better address the sustainability issue. Productivity growth, together with rural non-farm employment, could be the engine of poverty reduction, but it needs to be achieved through sustainable natural resource management. Any growth at the cost of natural resource degradation is a short-lived victory. If nothing else, degradation weakens the resource base, exacerbates the destructive impact of natural calamities, and worsens the vulnerability of the poor. Agriculture is one of the sectors where the importance of integrating environmental and economic policies is most obvious. Production-linked support policies, or subsidies directed to reduce agricultural production costs, can lead to excessive pressure being placed on scarce resources (water, forest, land) and to skewing the incentive against the most optimal and sustainable use of these resources. However, agriculture is also the sector where the trade-offs between poverty and environmental issues are the most difficult to solve in the short term, and may require well-thought-through transitional or mitigation measures.

Need to build social and human capital through a culturally- and gender-sensitive approach Education and capacity building should be seen as a priority for the rural population. The high rate of migration emphasizes the critical need to better equip the poor so that their skills become an asset in accessing better employment opportunities in increasingly urbanized economies. Governments should also realize that they may be made much more effective if they can work in the context of a dynamic, organized and developed civil society. It is also clear that the pervasiveness of poverty rates among ethnic minorities and the increasing role of women in rural society raise the issue of social inclusion and equal access to productive factors and assets. Government programs should devise approaches more adapted to cultural preferences and gender needs. The role of young people also needs to be recognized much more pro-actively as the engine of the future transformation of the rural sector. They represent a dynamic force to introduce new technology and establish networks and knowledge, and a development potential that should not be lost or left in the same poverty pattern as those of the previous generations.

Social safety nets and risk management for the severely marginalized. It is critical to improve the ability of the poor to manage risks. LCR faces high volatility with respect to national income and expenditure, and high vulnerability with respect to natural disasters. Moreover, its increasing integration in globalized markets makes it particularly exposed to commodity price volatility. Time and again, worldwide experience has shown that the poor have little protection against market-induced shocks and natural calamities.³⁵ Moreover, there is a group of rural poor who will remain marginally productive and will not be able to benefit from the rural non-farm economy or to migrate.

³⁵ Source: Securing our future in a global economy, by David de Ferranti, Guillermo E. Perry, Indermit S. Gill, and Luis Servén. World Bank Latin American and Caribbean Studies, the World Bank, 2000, Chapter Two, Table 2.1

Members of this group are typically older and female heads of households and farms in poorly-endowed areas. For this group, social safety nets and risk management tools combined with the promotion of income generating activities, both off-farm and on-farm, are critical to assure basic, decent living standards.

The Action Plan

Enabling factors and lines of action. The Action Plan proposes to build on and scale up what works or can be improved. It also provides new elements of a holistic approach that provides better linkages between the macro and micro levels, and between design and implementation capacity. The proposed Action Plan contemplates a series of priorities organized along a two-pronged approach. *Three enabling factors* may be considered as critical underlying elements in the strategy's implementation effectiveness in any country. *Six priority lines of action* describe the possible applications subject to country circumstances. Table 5 indicates possible levels of priorities in the various countries or subregions. Appendixes 4 and 9 also present practical cases of existing projects, best practices and experiences that can provide the platform for scaling up what works well, building the links with other sectors or new elements worth developing along the lines of the proposed strategy and Action Plan.

Enabling Factors

Maintain a supportive macroeconomic and trade environment. The macro agenda is necessary for rural growth and transformation. The Plan advocates a more pro-active approach of the rural network in the discussion of policy issues and programs that affect the sector and increased collaboration with PREM. Of key importance is the integration of rural issues in major country-level initiatives, e.g., CASs, PRSPs, and poverty assessments. Stronger analytical underpinnings is also needed for our operations and for the policy dialogue. The Bank should undertake more analytical and sector work to provide a better understanding of the factors that determine rural poverty, the incentive framework for the sector, the functioning of labor and financial markets, the land reform agenda, the marketing of products, the decentralization processes for the sector, etc.

Promote a new "Institutionality" for the sector and good governance. The combination of increased decentralization and the development of local democracy are key elements to progressively create the conditions for greater participation and accountability at the local level. This will enhance the effectiveness of government programs, increase ownership and make corruption more difficult. The debate around the issue of how to better articulate the social demand for services with the institutional supply, calls for a rethinking of the respective roles of the public sector (both central and sub-national governments), civil society, interest groups, private sector, etc. As the balance of power and the division of responsibility among (and within) levels of government changes, so does the nature of institutional structures and coordinating problems. A new "institutionality" for rural development is needed to address the new territorial approach and generate better accountability of government programs. But it is also needed to generate local leadership based on cultural values, social structures, traditional models, political realities, etc. This will help create the conditions for a better definition of local goals, differentiated policies, institutional strengthening, local democracy and the means required to access government programs or attract the private sector. The establishment of plural and inclusive fora for regional development planning, such as the Regional Councils in Mexico, could be seen as a response to the need for mobilizing and coordinating public and private resources required to address local development needs³⁶ in the search for a new "institutionality."

Develop a credible regulatory framework. This includes a number of elements conducive to more effective private sector participation and better functioning markets. The perception by the private sector that the judicial system works and that there is a set of viable and enforceable "rules of the game" will generate more trust in the sector and reduce the impression of risk. This includes: (a) establishing better-integrated price and market information systems; (b) developing appropriate regulatory frameworks, tools and enforcement capacity as critical factors for secure transactions, inventory-based financing (warehouse receipt systems), crop insurance, non-bank financial institutions, contract farming, and "collateralization" of assets; and (c) facilitating the development of commodity quality standards based on industry participation and needs, and the development of food safety norms.

³⁶ Source: Mexico – Institutional Coordination for Regional Sustainable Development. Raffaello Cervigni, the World Bank, April 2000

Lines of Action

Raise productivity and competitiveness as the engine of agricultural growth. Agriculture, as the productive sector per se, will remain the main activity for large segments of the rural population and the engine of agricultural growth. Agricultural growth will represent a key element of a poverty reduction strategy and will need to be generated through factor productivity increases. Broad-based growth also requires leveling the playing field to improve the access of the poor to services, infrastructure, markets and technology. Possible types of intervention are:

- *Public/private alliances in technology generation and transfer.* The Bank will adapt important design principles successfully implemented in recent years (e.g., Colombia, Venezuela, Ecuador, Peru, Nicaragua) to promote the interface between the public and private sectors for more effective delivery of technology generation and transfer. Competitive grant systems for technology generation and transfer are implemented on a demand-driven basis by locally-run networks and institutions and have proven to be effective tools in better assisting smallholder agriculture and women's needs. These promote participation, links and better access to information among various actors: central governments, state governments, municipalities, private sector, firms and farmers. Competitive strategic alliances are also generated with international private partners and research organizations, thereby ensuring access to the latest knowledge for the sector (biotechnology). These systems have proven to be able to leverage considerable additional financing from the implementing agencies, thereby activating unused capacity in the system.
- *Smallholder/private business alliances in the production-marketing chain.* Governments should encourage productive alliances with the private sector through mechanisms that facilitate small farmers' integration in the supply chain, their access to land, and organizational capacity (Colombia). Contract farming has been expanding lately and is an important tool in modernizing agriculture. It provides the crucial linkage among input suppliers, credit providers, crop purchasers, insurance and farmers. It helps farmers reduce risk and facilitates access to capital and technology by young farmers who want to enter the business. Now more than ever, smallholders must be integrated in a chain within which scale and market power are being increasingly concentrated at the retail end—supermarkets. The Bank will identify changes in the regulatory and incentive framework that promotes such alliances.
- *Integrated water resource management for competitive agriculture.* While past interventions in irrigation programs have largely been successful in increasing productivity, the thrust of the next generation of irrigation programs should be in terms of supporting an integrated approach to sustainable management and use of water resources. Such an integrated approach would improve the efficiency of water use through increasing yields per unit of water used and through conversion to higher-value crops. This would require increased attention to agricultural competitiveness and more efficient cropping patterns; increased decentralization of water management to local users in the context of watersheds (water users' associations and river basin councils); the further development of water markets; and the modernization of off-farm and on-farm irrigation systems. The Bank will draw upon its worldwide experience and expertise to assist governments and stakeholders in designing and financing such an integrated approach.

Pursue a systematic approach to improve the competitive functioning of factor and goods markets. Efficient and competitive markets are the lifeline of any well-functioning market economy. They provide the critical links through which resources flow in response to constantly evolving market signals. Their functioning largely determines whether growth is efficient and broad-based. For this to happen, factor markets (land, financial services, labor) and output markets must function competitively and efficiently. Their development is critical for agriculture in its transformation from subsistence to commercial. In LCR, rigidities, weak or non-existing property rights, monopolies and other forms of market collusion abound. These undermine the struggle of millions out of subsistence systems and poverty.

- *Land.* The Bank will build on a number of positive experiences in both land administration and land reform throughout LCR (e.g., Central America, Argentina, Brazil and Paraguay). In general, land regularization, certification, titling and registry have allowed greater tenure security and improved land market transactions. Even in very sensitive areas (Northeast Brazil, Afro-Colombian communities), the market-assisted approach has performed better than traditional approaches in terms of facilitating access to target groups, and created more transparency on the quality and prices of land transferred. In addition, land regularization projects generate basic spatial information essential for any kind of economic development plans, e.g., siting of roads and public services. In so doing (and to the extent that they are constantly updated), they benefit not only the efficient operation of land markets but also the process of development. Land programs can be effective not only for the

inclusion of the poor in the productive process but also as an effective tool to boost the competitiveness of the family farms sector. Moreover, recognition by credit institutions of property rights as loan collateral can facilitate access to financial services. Furthermore, access to land is not necessarily limited to ownership. Land markets should be developed so as to offer different tenure regimes including rental and long-term contracts.

- *Rural finance.* Success in rural finance interventions has been elusive but new elements bring encouraging signs that governments should build on and expand. The demise of the directed credit approach, the inefficiency of public banks and the absence of the formal private commercial sector (despite macro and financial sector reforms), makes rural financial services a strongly missing market. This restricts the economic opportunities of small enterprises, prevents access to the inputs so badly needed to evolve along the technological curve, and hampers movements towards more lucrative off-farm activities. The only sector that somehow managed to survive and proved resilient to financial crises and government withdrawal is that of non-bank savings and loan institutions. There is an urgent need to build on the few micro-finance operations in the portfolio (e.g., Brazil, Mexico and Argentina). They are trying to find new solutions to the development of mechanisms to reduce the transaction costs of financial services, improve the financial sustainability of non-bank financial intermediaries and expand outreach to low-income rural communities. The Bank can finance technical assistance and capacity building programs that seemed the most appropriate instruments to strengthen local institutions on the basis of “mutualistic” approaches, maintaining financial discipline based on savings and loans and access by the poorest groups. Given the pivotal importance of rural finance for poverty reduction, the Bank needs to engage client countries in a more pro-active dialogue and action. See Appendix 7 on a rural finance strategy.
- *Product markets.* In many areas, especially where there is not a sufficient critical mass of production that can promote competition among buyers, or where there is not a sufficient level of producer organization, marketing has organized itself along oligopolistic lines. Moreover, deficient storage systems and the absence of well-functioning warehouse receipt systems weaken farmers’ bargaining capacity and oblige them to sell when prices are lowest. Poor areas and domestic marketing channels are the most affected. The Bank can help identify the mechanisms and regulations that could revive the competitive and efficient market functioning. It can also promote local commercial organizations, micro-enterprise development, farmers’ associations, transformation activities that can add value to primary production, cooperative organizations for services, and the development of systems for inventory financing. It can also help establish integrated price and market information systems. By making this information more accessible to all strata of society (producers, operators, consumers, investors and policy makers), it would contribute to a critical public good element in the functioning of markets. Furthermore, by facilitating the development of commodity quality standards based on industry participation and needs, and the development of food safety norms, the Bank can also facilitate the modernization of the sector and the access to markets. Finally, it can develop projects that would take advantage of the possibilities offered by “e-trade,” opening up new ways for producers’ organizations and municipalities to access new market opportunities and bypass the grip of intermediaries.

Foster a “rural space” approach and regional development beyond agriculture. Community-driven development would be pursued as an important platform for enhanced participation, social capital and local micro-project development. However, its concept would be expanded so as to build better integration with municipal development, markets, micro-enterprises, natural resources management, alternative opportunities, access to services and private sector development. Non farm employment would be promoted as a vehicle to broaden approaches beyond the supply side only or the local market. (Appendix 9 documents best practices and case studies in non farm employment creation in LCR). This means repositioning rural development in a regional context where the “rural space” would be the underlying factor for broad-based rural transformation and for the development and strengthening of local institutions. An increasingly convincing argument points to the need to focus development efforts in the context of a territorial approach that derives from the increasing trend towards decentralization, democratization, municipal autonomy and local participation processes. It will require effective cross-sectoral participation and a strong demand-driven approach since priorities will be defined locally according to social values, agro-ecological conditions and the regional economy. This will provide the guiding thread that will ensure better consistency, economies of scale and synergy of future interventions.

- *Community-empowerment principle works.* A hallmark of many projects in LCR (e.g., Northeast Brazil, Mexico, El Salvador, Guatemala, Honduras, Bolivia, Peru) is that they are built on the community-empowerment principle which, according to evaluations and anecdotal evidence, works both in terms of process and product. These community-driven development projects seek to better target funds to beneficiary groups and more cost-effective use of the resources in ways that are considered of local priority. They build human and social capital

and facilitate the establishment of structures maintained and operated by the beneficiary communities. They also have political recognition and support which are essential for their sustainability and replication elsewhere. Central and/or state governments and donors provide the crucial enabling environment in the sense that they promote the strengthening of local institutional structures. While local responsibility is promoted, fair and transparent “rules of the game” are put in place which are accepted by the local communities and applied in a consistent fashion. In short, the approach strengthens local governance and makes the delivery of productive projects, small infrastructure and services more effective. The Bank intends to draw upon this rich experience to promote participatory development.

- *Promote municipal and regional development.* This approach inevitably associates urban centers and rural areas in the context of a continuum of mutually reinforcing and fully integrated activities and markets. This perspective makes it possible to look at broad-based rural development strategies from a new angle. This angle is based not only on agriculture but also on off-farm activities; not only on production but also on marketing; not only on productivity but also on income and total welfare; and not only on dispersed groups and communities but also on the existence of ethnically cohesive populations. In this respect, public works in small and medium municipalities, rural water supply, rural roads, local infrastructure and services, can go a long way in rendering rural areas more attractive. In so doing, they would contribute to rural development, creating an environment conducive to local employment, facilitating the diversification of the rural sector outside agriculture, and reorienting population movements for the benefit of the local economy (Mexico, Brazil). It also means a stronger emphasis on building municipal capacities and institutional strengthening programs. Regional development—as opposed to micro-project scale—would provide a new vision to build on and scale up community development programs. It would provide the critical link with municipalities, the economies of scale necessary to attract the private sector, the connections of rural areas with the rest of the economy, and thus help extract the poor from poverty. To realize the promise of regional development, the Bank needs to build internal and external cross-network partnerships including ones at the different levels of government.

Manage natural resources in a sustainable way. Finding win-win combinations for conservation and development is at the heart of sustainable NRM. It means that more attention ought to be devoted to the generation and dissemination of alternative technologies and approaches to conventional agriculture that can demonstrate their viability and prove that they can be financially attractive. Environmental mainstreaming into agricultural policies needs to be pursued with the full participation of the main actors—the producers—and will require ownership on their part. Producers are well aware of the serious threats that soil erosion, degradation of landscapes, and pollution pose to their standard of living and to the sustainability of their activities. However, in many cases the lack of access to better alternatives and opportunities and the weakness of property rights leave no choice but short-term approaches to a survival strategy. This will require the elaboration of more differentiated approaches combining elements of policy, technology, education and access to alternative options, according to local circumstances.

- *Strengthen natural resource management, particularly in risk-prone areas.* This topic is critical for sustainable development, but it presents particularly acute trade-offs for the rural poor in risk-prone areas. A recurrent one is the potential trade-off between short-term private benefits and long-term social costs. Therein lies the main challenge of promoting NRM and rural poverty reduction at the same time. NRM is conflict management *par excellence*. Finding win-win combinations for conservation and development is at the heart of sustainable NRM because survival is at stake. Here too, the Bank can draw upon a number of project-level successes that have developed win-win solutions for soil conservation and yield increases for small farmers organized by micro-catchments such as those in Brazil (Paraná and Santa Catarina), Chile (Secano), Mexico (Oaxaca), Bolivia, Colombia, or through forest communities, e.g. Brazil (Minas Gerais) and Mexico (Oaxaca). But the Bank should do much more. A continuing concern is how best to upscale impact by mainstreaming conservation into development. The search is on for instruments capable of better integrating cross-sectoral issues and multi-level interventions. There is also the need for determining relative priorities in packaging interventions in soils, water and watersheds, flora and fauna in protected and non-protected areas. The Bank can work with governments and other partners in developing land conservation programs, management agreements through regional development approaches, and initial conversion subsidies to support the shift towards environmentally-friendly techniques or organic farming. Appendixes 4 and 8 on selected issues in natural resource management present key findings from a review of the sector, including the rationale for Bank involvement in forestry in LCR.
- *Global Environment Facility (GEF) plays an important role.* GEF projects can play an instrumental role in facilitating better mainstreaming between conservation and development. In the context of scarce resources it

will also be important to use GEF resources in a way that creates the greatest leverage and impact, through increased blending with Bank loans and partnership with other players.

Build human and social capital. LCR governments should consider investments in this area as powerful means to poverty reduction in a region with high rural-urban migration. Evidence from developed countries shows that a critical factor in reducing income disparities between the urban and rural sectors has been a flexible and dynamic labor market, associated with access to education. Education has been shown to be an important escape route from poverty and is fundamental for opening doors to a better life. At the same time, building social capital at the community and regional levels can be a powerful instrument to increase the organizational capacity, social cohesiveness and intensity of interactions in rural areas. Moreover, rural poor, who tend to live far from and have little access to hospitals and health centers, receive relatively low-quality care. This is key to a dynamic sector that can participate more actively in the economic life of a country.

Expanding the delivery of basic education and health services. Education should be viewed as a priority for the rural population, especially education for girls. The Bank should focus on developing synergistic cross-network partnerships among the different sector units operating in rural areas to promote human capital development. It should build on the community-managed school approach pioneered by the EDUCO project in El Salvador (also extending to Guatemala and Honduras) that has yielded substantial results in terms of improved attendance and retention of teachers and students alike, increased enrollments and attainment of higher educational standards. The Bank should also promote an important complement to education, namely assistance to reduce infant and child malnutrition and high dependency ratios, particularly among certain groups and regions. A combination of lower fertility and better job options for women can help reduce fertility rates and improve their children's health and education prospects.

- *Promoting social inclusion while respecting cultural diversity of certain groups.* Indigenous peoples and Afro-Latin Americans shoulder a disproportionate burden of rural poverty. Governments should develop inclusive approaches to assist them. The Bank can draw upon the region's community empowerment approach that is well suited to working with these communities. Important activities have been the promotion of communal land titling (Colombia), integration of agro-forestry with NRM (Peru), and development of non-timber eco-products, eco-markets, eco-tourism, organic coffee (Mexico, Panama, El Salvador). Some projects combine several of the above objectives and are more specifically targeted to indigenous peoples' development (Ecuador, Argentina). In LCSHD, efforts would be pursued to reach indigenous peoples through bilingual education programs. The strengthening of social capital and targeted interventions which are more adapted to the cultural preferences and values of ethnic groups, will continue to be an important line of action for the Bank. Given the severity of poverty in these communities, and given the typically long gestation for benefits to materialize, a major challenge for the social inclusion agenda is scaling up impact through cross-network partnerships.

Developing an integrated approach to reduce risk factors for youth –at risk. Better schooling and better job opportunities are at the heart of the complex problems facing youth at risk. The task of job creation and job preparation needs to be integrated. For sustainable creation of jobs that are meaningful for youth, a conducive policy framework is essential for a broad-based, labor-intensive growth strategy. This is already a core component of the proposed strategy. This must then be complemented by coherent and cost-effective human capital formation programs. Furthermore, a more dynamic and productive agriculture, better integrated in a more attractive regional context, is likely to retain the youth that the sector so urgently needs.

Strengthening risk management and safety nets. To enable the rural poor to better withstand market-induced shocks, a more diversified income and stronger asset base are essential, together with the development of better risk management methods. Given the region's high propensity for natural disasters, the poor also need to be assisted to better manage natural calamity risks so as to avoid increased hardship, distress sales of household assets, forced migration, etc. The devastation of Hurricane *Mitch* or of the *El Niño* phenomenon may be the primary impetus for current disaster insurance and prevention in Honduras. However, the probability of future disasters in Honduras is no higher than the probability for any other country in the region. Analytical and project assistance in Mexico, Nicaragua and the Caribbean region has recognized the real danger of natural catastrophes and the importance of disaster planning in all danger-prone countries, and is implementing better instruments for mitigation and rehabilitation. For the severely marginalized in risk-prone areas, social safety nets are essential instruments. Many rural dwellers will not be able to reap the benefits of the progress on the "macro" front, in growth or diversification opportunities in the farm and non-farm sector. This includes many of the poorest, the elderly, widows and

smallholders in marginal areas without much productive potential. Differentiated policies will be needed among which we may highlight the substantial impact that safety-net programs could have.

- *Develop better risk management tools.* Governments' role in strengthening risk management is critical. Better instruments could be developed and implemented in the area of risk mapping and monitoring, early warning systems, prevention, price hedging tools, financing instruments and crop insurance (weather-based index). The Bank is supporting the governments of Argentina, Mexico and Nicaragua in developing broadly accessible risk management instruments to reduce exposure to co-variant risks. The development of micro-finance schemes based on savings and credit schemes can go a long way in smoothing income variability, facing emergencies and reducing the high vulnerability of the poor.
- *Strengthen safety nets.* Social security, public pensions (Brazil) and income support programs (Mexico's PROCAMPO and PROGRESA) can have high pay-offs and be very effective instruments in reaching a large number of the poorest. They not only reduce vulnerability and poverty but they can have a multiplier effect on investment. However, their targeting mechanisms should not be to the detriment of traditional solidarity mechanisms within poor communities. In general, it will be critical to adjust public programs to cultural preferences and community structures, especially in indigenous areas. The Bank can draw upon its international experience to help governments and other stakeholders design and finance cost-effective and responsive social safety nets.

What's old and what's new in the Action Plan

What is old: building on delivery mechanisms that work. The Plan builds on and improves what works and has succeeded in an effort to expand it and scale it up. The mechanisms of delivery based on community empowerment principles and on public-private partnership in technology generation and transfer have functioned well and should be pursued. There are many natural resource management initiatives that can provide a wealth of experiences on which to build. They remain, however, relatively scattered and would need to develop a critical mass of technological packages that can expand win-win situations in a more systematic way. Land administration projects have developed successful instruments to facilitate access to assets and improve security. A number of poverty reduction projects are key ingredients to rural development agendas and have promoted social capital together with access to productive investments and basic infrastructure (See Appendix 4). Many of these activities will continue to be pursued but the relative priorities among different priorities, how they are packaged, and how the Bank would organize itself to generate synergism, need to be reconsidered.

What is new: a vertical (policies and markets) and a horizontal (territorial) integration effort. The Plan also brings new approaches to revitalize the rural agenda and achieve higher impact on poverty reduction. In particular, it seeks to better integrate the rural sector to the rest of the economy and take advantage of better opportunities. It seeks better understanding of the incentive framework, and complementarity between the macro agenda and rural issues in an effort to ensure that the macro and sectoral frameworks are supportive of rural development. In this respect, the Plan places emphasis on increasing productivity as a key element to growth and better incomes. It also proposes to use community-driven development as a platform to seek better integration with municipal plans, regional priorities and urban opportunities through a "rural space" approach. A new "institutionality" will need to be promoted, much more attuned and responsive to local circumstances, participatory and accountable. The Plan seeks to much more squarely promote better access to technology and functioning markets, and especially the labor markets, the supply/product chains and financial services. It insists on building social and human capital as a fundamental asset for the poor. Finally it seeks to develop new instruments that would reduce vulnerability stemming from the lack of assets, economic shocks and calamities.

Consistency with the framework in the World Development Report 2001. The proposed strategy and Action Plan is fully consistent with the approach to reducing poverty in the World Development Report 2000/2001 on all fronts. It shares the recognition that a holistic strategy is necessary to tackle poverty effectively and should better promote: (a) opportunities (growth, equality in access and market development, public-private partnerships); (b) empowerment (decentralization, community empowerment); and (c) security (better risk management and social safety nets).

6. Implementation Arrangements—Achieving Synergy

Implementation of the Action Plan needs to get started by focusing on a number of internal and external priorities; it must be adapted to prevailing country circumstances and be shared by our clients. It needs strengthened cross-sectoral collaboration within the Bank, and better coordination with the donor community.

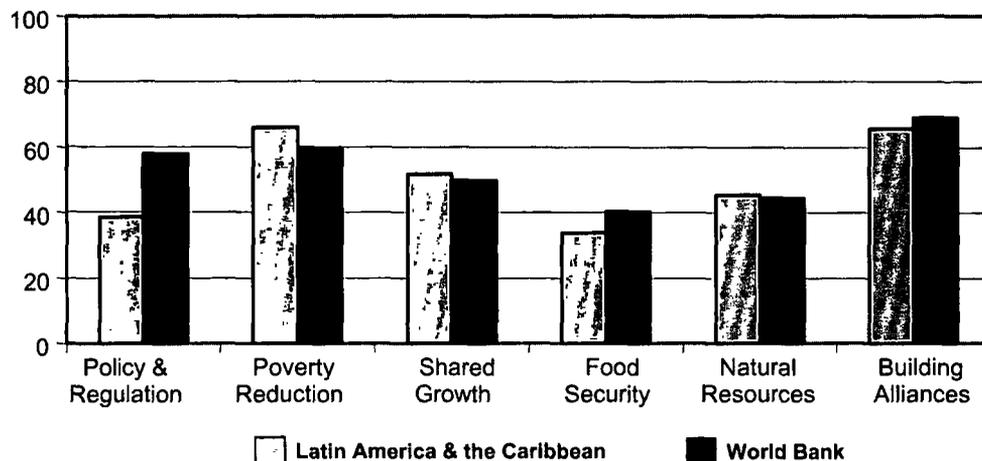
Getting started

The status of the present rural portfolio highlights five interesting features. (See Appendix 3). One, the rural portfolio is multi-sectoral. The many sectors that operate in rural space highlight the challenge of coordination to achieve synergism. Two, LCSES lending, which channels the bulk of the “rural” lending in LCR, has been declining and erratic over the past decade. Bank-wide, the entire “rural” Bank lending also experienced a sharp decline since the 1970s. This reduction in lending represents a major challenge for the Bank’s ability to accelerate rural poverty reduction. Three, community-driven projects are an important feature of the regional portfolio. These are projects in which the funds are either allocated directly to communities or with strong community participation in the preparation and implementation of priority actions. Four, the way rural issues are integrated in the Country Assistance Strategies and Poverty Reduction Strategy Papers has been very uneven across countries. This should represent an area of improvement in the way country-specific rural development strategies are to be developed if the Region wants to make a dent in rural poverty reduction. Five, while there are important opportunities for higher impact through the scaling up and expansion of existing successful initiatives, there are also important gaps with respect to the new agenda proposed in the Action Plan. This would require a revisiting of the focus and skill mix in the region.

Priority areas of internal action. In the short term it is proposed that internal action be prioritized in the following areas:

- Maintain the quality of the portfolio and pursue the targets for pro-activity and realism indexes established by the region.
- Play a more active role in the discussions leading to the preparation of the CAS, PRSP, and main AAA with an impact on the sector, in each country. This will require a more institutional approach to internal review mechanisms, quality control, and integration of the rural perspective in country discussions and development agendas. Evaluation of the CASs in the region, carried out by RDV, points to very uneven quality and weaknesses in several key areas (Figure 6.1). In several CASs the rural sector is overlooked in the name of selectivity. Key elements are often missing on the impact of the macroeconomic and sectoral policy reforms on the rural poor as well as on the rural-urban linkages. Food security analysis and key links with natural resources management are weak. Many also ignore potential rural alliances and partnerships with other donors. The proper integration of rural issues in the CAS depends highly on the effectiveness of the participation of sector staff and the functioning of country teams. It may have been given too little institutional priority which may explain the declining and erratic lending trend and the scarcity of sector work. One of the key challenges of the proposed Action Plan is to fully integrate rural issues in the CAS process and to strengthen the strategic case for more attention to addressing rural poverty.
- Plan for a revival of the Bank contribution to Analytic and Advisory Activities (AAA) and related workshops in the region in key areas of assistance to the revision, preparation and analysis of policy issues, sector strategies, rural poverty aspects, institutional development and evaluations of past interventions. When deemed necessary, intersectoral steering groups on thematic issues would be established to develop joint approaches and implementation arrangements. This will be key to upgrade the knowledge and understanding of country and sector issues.
- In a region where the approach to rural development is highly cross-cutting, the capacity to work across “silos” is extremely important. This will require a review of the internal mechanisms for budget allocation so as to overcome the key institutional obstacles to more effective intersectoral teamwork and other incentive-generating mechanisms to improve the way country teams function and effectively bring together sector and macro staff.

Figure 6.1 Satisfactory country assistance strategies, Latin America & the Caribbean vs. World Bank Average percentage



Priority Areas of Operational Involvement and Scaling-up

In the short term it is proposed that operational action be prioritized, scaling up a number of initiatives that have already proven their effectiveness or that represent key missing elements for the improvement of past development agendas. The CAS for each country would have to define the extent and scope of involvement in each priority area. Appendixes 4 and 9 describe a number of best practices and examples that can be used as references for the design principles in each of this Plan's proposed lines of action.

Strengthen our contribution to agricultural productivity and efficiency. Examples from Central America, Colombia, Venezuela and Mexico can provide an important basis on which to build for the improvement of key markets and access to critical assets and technology. This means stronger involvement in land administration, rural finance, farmers' organizations, and private-public partnership. The development of better technology and improved cultivation techniques in poor areas with productive potential could further increase rural income and diminish the rural/urban wealth gap. Public/private research and implementation partnerships have already increased agricultural competitiveness and quality in a variety of countries.

Expand financing for regional development in the context of a "rural space" approach. Examples from Brazil, Mexico, Nicaragua and Colombia can help scale up and improve community-based projects that can offer better opportunities for increased productivity both on-farm and off-farm. It also means improving access to basic services and enhancing institutional development, municipal capacity building, governance and social capital at the local level. A main priority in rural development is to diversify development beyond subsistence agriculture. Future pipelines could include projects aimed at developing non-agricultural rural growth opportunities (see Appendix 9). Although Argentina plans a broad-based diversification platform, farmers in Colombia will have little reason to avoid lucrative narcotics agriculture without support to transition to other forms of income. Future support to broad-based rural development in LCR countries would help integrate urban/rural opportunities and reduce the income gap. Several countries plan to develop rural infrastructure (particularly roads); pursuing such plans in other countries would lay a strong foundation for diversification, productivity increase and growth of rural economies. Developing a framework to facilitate job-finding, training and housing for rural migrants would decrease both urban and rural poverty, and prevent birth into rural poverty from being a curse on lifelong poverty.

Further develop the integration between rural development and natural resources management, i.e., watershed management, land conservation, and sustainable use of resources. Preserving natural resources for future generations while allowing eco-tourism, biomedical research and eco-friendly products to provide diverse sources of income are compatible and worthwhile goals. The Meso-american Biological Corridor, a targeted area for sustainable development, encompasses 30% of Central American territory and exemplifies cooperative natural

resource management. In the past, logging trees and building pastures have been the most expedient sources of income from such areas. The ECO-O.K. program has branded coffee, an otherwise generic commodity, by certifying its environmental friendliness. Branding an agricultural product by recognizing its environmental sustainability can allow the product to sell for a higher price on foreign markets.

Improving health and education. Given that the rural poor have fewer care options available, and that for various reasons (insufficient nutrition, reluctance to invest in preventive care, manual labor, stress) they suffer disproportionately from frequent illness, effective health care for the rural poor should be a priority.³⁷ Lending could focus on: strengthening the institutional capacity of public health departments; ensuring rural access to effective health care; developing funding and/or health insurance programs for the poor; educating the rural poor about available care options, and emphasizing cost-effective prevention over post-illness treatment. Creating incentives for families to send their children to school by offering the family attendance benefits diminishes truancy among poor rural children and increases educational demand. Developing similar incentives for teachers to work through the entire week – by attendance-based payment or community groups that monitor teacher attendance – augments education supply. Mexico’s PROGRESA and CONAFE and El Salvador’s EDUCO programs have harnessed such tools for educational improvement. Pursuing educational development in rural areas opens up new opportunities, improves agricultural efficiency, and promotes rural economic diversification.

Internal Implementation Arrangements and Issues

A daunting task ahead. This Action Plan embodies a change of paradigm, from piecemeal attacks on poverty to a holistic approach. Rural development has become much more integrated than before. The combined effect of decentralization and democratization means that sectoral policies and programs need to give way to local planning and priorities, which, by nature, require stronger focus on inter-sectoral coordination and complementarity among the various sectors and donors. For these synergies to be captured, the Bank must also upgrade the way it does business. The main challenge of the Action Plan is institutional, not conceptual.

A holistic approach with a country focus. The Action Plan recognizes that only a multi-sectoral approach can work. It provides a comprehensive diagnostic and offers the strategic directions and actions to be undertaken; however, it recommends a selective implementation at the country level in view of the Bank’s added value, ongoing dialogue and local circumstances. It is not a “one-size-fits-all” approach. The next step will be to translate this overall framework into country-level strategies and operations, and to work across networks and closely with clients. CAS, PRSPs and Poverty Assessments will be the ideal instruments by which to ensure that rural issues are fully incorporated and internalized. Country Directors and Sector Leaders will be instrumental in ensuring adequacy and adaptation of the Action Plan so that it is consistent with country policies and development agendas. The comparative strength of each network and family in each country context would determine leadership for the various initiatives and operations, but in most cases this will mean stronger inter-sectoral teams. This in turn requires the key involvement of Sector Directors and Sector Managers who would arrange for the constitution of teams with adequate skill mix, and review the current budgetary process which hinders cross-network partnerships and support.

Cross-network participation. A major departure from the past is developing systematic partnerships between the Rural Network and other networks. The main areas of cross-network partnerships are:

- The Environmentally and Socially Sustainable Development (ESSD) network and the Poverty Reduction and Economic Management (PREM) network would work jointly to ensure that the impact of the macro policies would be supportive of rural development. PREM would continue to focus on promoting macro stability, adequate trade policies, competitive exchange rate regime, more supportive public expenditure programs and the removal of distorting government policies in rural markets. In addition, they would develop decentralization strategies and better understanding of the analytical underpinnings of poverty and of the incentive framework for the sector.
- ESSD and the Human Development (HD) network would work jointly to elaborate more consistent programs in addressing social sector issues, participation of minorities and indigenous peoples’ development. They would also promote the inclusion of culturally-consistent components in the health and education programs. They

³⁷ Source: Country Assistance Strategy of the World Bank Group for the Dominican Republic, report no. 19393-DO, June 9, 1999; 12.

would work together to ensure consistency of implementation of Social Funds and Rural Investment Funds and strengthening of safety nets in rural areas.

- ESSD and the Finance and Private Sector and Infrastructure (FPSI) network would develop joint strategies and programs on how best to help governments in the development of rural-urban linkages, and to deliver public goods and basic infrastructure services in rural areas, especially at the level of municipalities. They would also develop rural finance approaches that are consistent with the specificity of the rural sector and with the overall financial sector policies and regulatory frameworks.

Major skill gaps in the rural network to implement priorities of the Action Plan. A thorough inventory of current staff skills and their suitability for implementing the Action Plan is still to be carried out. A preliminary identification of missing skills highlights the importance of staff being able to perform policy work, to integrate across networks, and to put together programmatic-type instruments. These skills will also be needed for more effective participation in the discussion of the CAS, Poverty Assessment, and PRSP. On the technical side, the region will need to strengthen its skills in the areas of rural finance, agricultural productivity, municipal development, marketing and agro-business and risk management.

The high cost of safeguard policies may be a deterrent. While it is acknowledged that good compliance with safeguard policies is simply better-quality business, it needs to be recognized that projects in the rural sector present a higher level of compliance requirements which imply more resources and time to prepare. This may act as a disincentive if transaction costs become excessive. It is also important to recognize the higher level of risk that staff confronts and to remove possible biases against innovation and risk-taking.

Lending instruments. With respect to lending instruments, investment projects will continue to play an important role, especially for specific poverty-targeted approaches and innovative interventions, which require strong implementation support and field supervision. More effective integration can be pursued through the use of lending instruments along thematic lines that require blurring the “silos” and sectoral frontiers. New instruments to explore are programmatic loans. By their nature (quick-disbursing), they will require an adequate policy environment for the particular subsector to be financed, and solid institutions with sound procedures and implementation rules in place.

External Implementation Arrangements and Issues

Nurturing client ownership. Without client ownership this strategy and Action Plan are moot. Moreover, it must be acknowledged that, in most situations, development efforts take the form of progressive, quantum leaps that require considerable dialogue and buy-in from various constituencies. LCR presents a diverse mosaic of rural policies and programs, and while some general trends may be detected, endorsement and implementation of this Action Plan may take different forms. In some countries there is already a high degree of convergence with the proposed Action Plan and most of it may already be under implementation; in others agreement and interest may be only partial. This strategy and Action Plan should be seen as a contribution to the ongoing discussion on rural development issues in LCR and the way forward. After all, it could be argued that most of what this document proposes is already under implementation in one country or another in LCR. This Action Plan essentially tries to coalesce and build on what seem to be best practices and innovative, successful approaches. In that respect, the Bank could expand cross-fertilization efforts among Latin American countries through study tours, field visits and international workshops. Countries in LCR could seize this opportunity to provide momentum to the rural development agenda and, as a priority, look forward to implementation with a sense of urgency. The Bank could considerably contribute to a partnership. It would offer, among other things, renewed commitment and support for action on the ground, enhanced implementation capacity, and more accurate and specific analytical work to deepen the reciprocal understanding around rural development issues and the potential for success and for improvement of the Action Plan.

Promoting partnership is good business. It is generally felt that the strategic thrust of this rural development strategy for LCR countries is widely shared among donors. The Bank should continue to explore and develop regular channels for communication and consultations with other potential partners, to ensure consistency of strategies and to explore co-financing possibilities. Future Bank funding can be influenced not only by client requests, but also by partner involvement. The IDB has a long history of investment, with nearly US\$1.3 billion in rural development-

targeted lending between 1963-1997.³⁸ In March 2000, six international organizations co-founded the Interagency Group for Rural Development in Latin American and the Caribbean, which seeks to develop coordinated strategies and complementary projects on rural development.³⁹ Many institutions fighting rural poverty in LCR countries have institutional knowledge and local experience. Developing projects that complement existing international efforts, and combining the Bank's knowledge with the experience of other organizations, maximize project effectiveness. Partnerships should be sought on a country basis with the objective of learning and transferring experiences and developing common ground in approaches among partners. Better consistency among donors will enhance the chances to leverage the establishment of a "rural constituency" within governments and to pursue a coherent dialogue for increased effectiveness.

Monitoring and Evaluation

Country priorities. Table 6.1 suggests areas of priority focus in the various LCR countries or sub-regions that could possibly guide the application of the above strategic framework to a very heterogeneous region. How best to balance these strategic priorities and selection criteria will have to be determined within the context of a given CAS and, if applicable, PRSP. Government receptivity, stakeholder interest, macroeconomic stability, the status of public expenditure, and the strengths and weaknesses of governance structures, would be key factors in shaping the proposed Action Plan for any country. This framework for the regional Action Plan would then become a major input into these important processes and products.

Monitoring and evaluation indicators. In all operations, the Bank will develop simple but effective monitoring and evaluation systems adapted from International Development Goals (IDG) on which international consensus already exists. While we should maintain flexibility in implementation and admit that trial and error will still be necessary as part of the learning process, a minimum set of robust indicators that are reliable, user-friendly and cost-effective will be developed with respect to impact assessment. Key internal indicators to be monitored in order to measure effectiveness in the implementation strategy would be:

- treatment of rural issues in CAS/PRSPs as regularly evaluated by RDV;
- reversal of the present negative trend in lending;
- revival in the preparation of sector work through the inclusion in work programs of key studies and analytical work in all countries;
- quality of the portfolio in terms of:
 - quality at entry and effectiveness of supervision as evaluated by QAG
 - meeting the regional indicators with respect to risks, realism and pro-activity
 - delivery and quality of the work program; and
 - cross-sectoriality of task teams in terms of participation of other sector staff in project/ESW preparation and supervision.

³⁸ Source: Rural Poverty Reduction, report no. ENV-122, E, S. Inter-American Development Bank, June 1998.

³⁹ Participants are: the Inter-American Institute for Cooperation on Agriculture, the United Nations Food and Agriculture Organization, the Economic Commission for Latin America and the Caribbean, the International Fund for Agricultural Development, the German Agency for Technical Cooperation and the Inter-American Development Bank.

Table 6.1 Framework for Regional Action Plan for Rural Development
Enabling Environment & Lines of Actions

	<i>Sub-regions & Countries</i>												
	<i>Mexico</i>	<i>Colombia</i>	<i>Venezuela</i>	<i>Central America</i>	<i>The Caribbean</i>	<i>Brazil</i>	<i>Bolivia</i>	<i>Ecuador</i>	<i>Peru</i>	<i>Argentina</i>	<i>Chile</i>	<i>Paraguay</i>	<i>Uruguay</i>
Enabling Environment													
Policies (Including Labor Markets)	M	M	H	M	H	M	L	L	L	M	M	H	M
Institutions	M	H	H	M	M	M	M	M	H	M	M	H	M
Governance	M	H	M	H	H	M	M	M	M	M	M	H	M
Lines Of Action													
Broad-Based Agricultural Growth													
Public-Private Partnerships In													
Technology Generation & Transfer	M	H	M	M	L	M	L	L	L	L	L	L	L
Supply Chain/Marketing	H	M	M	M	L	L	M	M	M	L	L	L	L
Irrigation	M	L	L	M	M ¹	L	L	M	H	M	M	M	M
Efficient & Competitive Markets													
Output	H	M	M	H	H	M	L	L	M	L	L	M	L
Land	M	H	M	H	H	H	L	L	L	L	L	H	L
Rural Finance	H	H	M	H	M	H	L	L	M	L	L	H	M
Regional Development													
Community-Driven Development	M	H	H	H	H	H	L	L	H	M	M	H	M
Municipal Development	H	H	H	H	L ²	H	M	H	H	H	M	L	L
Rural Infrastructure	M	M	L	H	H	H	M	M	M	M	L	M	M
Sustainable Nat. Res. Management													
Sustainable Use Of Natural Resources	M	H	M	H	H	M	M	M	M	M	M	M	L
Watershed Management	H	M	M	H	H	H	M	M	M	H	H	L	L
Forestry	M	L	L	H	H	H	L	M	L	M	M	M	L
Investment In Human Capital													
Health, Nutrition	M	M	M	H	L	M	M	M	M	L	L	H	L
Basic & Secondary & Bilingual Education	H	H	M	H	M ³	H	H	H	H	L	L	M	L
Inclusive Approach. Gender, Youth, Ethnic Minorities	H	H	M	H	M ⁴	H	L	H	M	M	H	M	M
Mgt. Of Economic & Natural Risks													
Vulnerable Target Groups And Areas	M	H	M	M	M	L	H	H	H	M	L	L	L
Risk-Management Options	H	M	M	M	M	L	M	L	L	M	L	L	L
Social Safety Nets	M	H	M	H	H	M	M	M	M	M	L	M	L

Notes

H: high-priority areas for short-term intervention on which government should focus. M: Areas of intervention of medium priority; and L: items of lower priority or that have already been addressed

H for OECS: M: for Haiti and Dominican Republic; H for Trinidad & Tobago, Jamaica, and Guyana; H for Jamaica and St. Lucia

Appendix 1 The Vision of Rural Well-Being of the Rural Family

These are extracts from *From Vision to Action: A Sector Strategy, 1997*. The approach taken in this action plan is based on this vision.

The Vision of Rural Well-Being

- Rural growth is widely shared, with private and competitive agriculture and agribusiness as the main engine of growth.
- Family farms and non-farm enterprises provide ample remunerative employment opportunities to men and women.
- Rural people manage the soils, water, forests, grasslands, and fisheries in a sustainable manner.
- Rural people are linked to well-functioning markets for products, inputs, and finance.
- Rural people have access to medical care, clean water and sanitation, educational opportunities, and sufficient nutritious foods.
- Essential legal frameworks, public investment, productive and social services are provided and financed in a pluralistic, decentralized and participatory manner.

Strategic Check List for Rural Development

- Macroeconomic and sectoral policies are stable. The foreign exchange, trade, and taxation regimes do not discriminate against agriculture, but are very similar for the rural and urban sectors.
- The growth of private agriculture is encouraged by minimizing distortions among input and output markets and by market development for agricultural and agro-industrial products, both at home and abroad.
- Public investment and expenditure programs for economic and social infrastructure, health, nutrition and education do not discriminate against rural populations or the rural poor.
- Large farms and large agro-industrial firms do not receive special privileges and are not able to reduce competition in output, input, land or credit markets.
- The agrarian structure is dominated by efficient and technologically sophisticated family operators who rely primarily on their own family's labor. The rights and needs of women farmers and wage-laborers are explicitly recognized.
- Access to and security of land and water rights is actively promoted. Restricting land rentals hurts the poor. Where land distribution is highly unequal, land reform is needed. Decentralized, participatory, and market-assisted approaches to land reform can achieve this much faster than expropriation by land reform parastatals.
- Private and public sectors complement each other in generating and disseminating knowledge, and technologies. Public sector financing is particularly important for areas of limited interest to the private sector, such as strategic research, smallholder extension, and diffusion of sustainable production systems and techniques.
- Rural development programs mobilize the skills, talents and labor of the rural population, through private sector involvement.
- Rural development programs are designed so that the rural poor and other vulnerable groups are fully involved in the identification, design, implementation of the programs. Otherwise rural elites will appropriate most of the benefits.

Appendix 2 Basic Statistics on Poverty, Social Indicators, Inequity, Population and Economic Structure

This Appendix presents the basic statistics concerning poverty, population projections, and a taxonomy of economies in the region with respect to the relative importance of agriculture and the rural non-farm sectors in selected national economies. Jointly these statistics quantify poverty, urban and rural, shows why rural poverty is a major problem to be addressed and why it is likely to remain so for years, and the different economic structures within which rural poverty is found.

Poverty

Table A2.1 Percentage of poor from urban and rural population
population in millions

<i>Year</i>	<i>Population Total</i>	<i>Total number of poor</i>	<i>Urban extreme poor/urban Pop. (%)</i>	<i>Rural extreme poor/rural Pop. (%)</i>	<i>Percentage of Poor from total Pop.</i>	<i>Urban poor/Urban Pop. (%)</i>	<i>Rural poor/Rural Pop. (%)</i>
1986	408.3	136.2	9.7	24.8	33.4	25.4	50.8
1989	431.9	161.2	12.8	31.0	37.3	30.3	54.2
1992	455.7	182.3	13.3	37.4	40.0	31.7	61.4
1995	479.3	175.9	11.3	32.9	36.7	29.2	57.6
1998	501.3	173.5	11.1	31.0	34.6	27.5	55.6

Sources: Wodon, Quentin, Rodrigo Castro-Fernandez, Kihoon lee, Gladys Lopez-Acevedo, Corinne Siaens, Carlos Sobrado, and Jean-Philippe. 2001. *Poverty in Latin America: Trends (1986-1998) and Determinants*. Tre, World Bank, April 11, 2001.(Mimeographed.)

Table A2.2: Urban-Rural Poverty in LAC
percentage

<i>Year</i>	<i>Total Poor (millions)</i>	<i>Urban poor from total poor</i>	<i>Rural poor from total poor</i>
1986	136.2	52.3	47.7
1989	161.2	57.1	42.9
1992	182.3	57.0	43.0
1995	175.9	58.3	41.8
1998	173.5	59.2	40.9

Source: Computed from *ibid.*

Table A2.3 Rural Poverty in Latin America & the Caribbean 1986-1998

<i>Indicator</i>	<i>Units</i>	<i>1986</i>	<i>1989</i>	<i>1992</i>	<i>1995</i>	<i>1998</i>
Total Poor in LAC	millions	136.2	161.2	182.3	175.9	173.5
LAC extreme poor	millions	58.8	78.6	91.4	81.7	80.9
Rural poor	millions	65.0	69.2	78.4	73.5	70.9
Rural poor as % of total LAC poor	percentage	47.7	42.9	43.0	41.8	40.9
Total number of rural extreme poor	millions	31.7	39.6	47.7	42.0	39.5
Rural extreme poor as % of LAC extreme poor	percentage	53.9	50.4	52.2	51.4	48.8
Rural population	millions	127.8	127.6	127.7	127.6	127.5
Rural poor as % of Rural population	percentage	50.9	54.2	61.4	57.6	55.6
Rural extreme poor as % of Rural population	percentage	24.8	31.0	37.4	32.9	31.0

Source: Computed from *ibid.*

Table A2.4 Poverty in urban areas in Latin America & the Caribbean 1986-1998

<i>Indicators</i>	<i>Unit</i>	<i>1986</i>	<i>1989</i>	<i>1992</i>	<i>1995</i>	<i>1998</i>
Total number of poor in Latin America & the Caribbean	millions	136.2	161.2	182.3	175.9	173.5
Total number of extreme poor in Latin America & the Caribbean	millions	58.8	78.6	91.4	81.7	80.9
Urban poor (in millions)	millions	71.2	92	103.9	102.5	102.7
Urban poor as % of total LAC poor	percentage	52.3	57.1	57	58.3	59.2
Total number of urban extreme poor (in millions)	millions	27.1	39	43.7	39.8	41.4
Urban extreme poor as % of LAC extreme poor	percentage	46.1	49.6	47.8	48.7	51.2
Urban population in millions	millions	280.5	304.3	327.9	351.7	373.8
Urban poor as % of urban population	percentage	25.4	30.2	31.7	29.1	27.5
Urban extreme poor as % of urban population	percentage	9.7	12.8	13.3	11.3	11.1

Source: *Ibid.*.

Table A2.5 Number of poor in rural and urban areas in Latin America & the Caribbean region (population in millions)

<i>Indicator</i>	<i>Unit</i>	<i>1986</i>	<i>1989</i>	<i>1992</i>	<i>1995</i>	<i>1998</i>
Urban headcount	percentage	25.4	30.2	31.9	29.2	27.5
Total urban population	millions	280.5	304.3	327.9	351.7	373.8
Total urban poor	millions	71.2	92.0	103.9	102.5	102.7
Rural headcount	percentage	50.8	54.2	61.4	57.6	55.6
Total rural population	millions	127.8	127.6	127.7	127.6	127.5
Total rural poor	millions	65	69.2	78.4	73.5	70.9

Source: Computed from *ibid.*

Figure A2.1 High incidence of extreme poverty is a rural phenomena

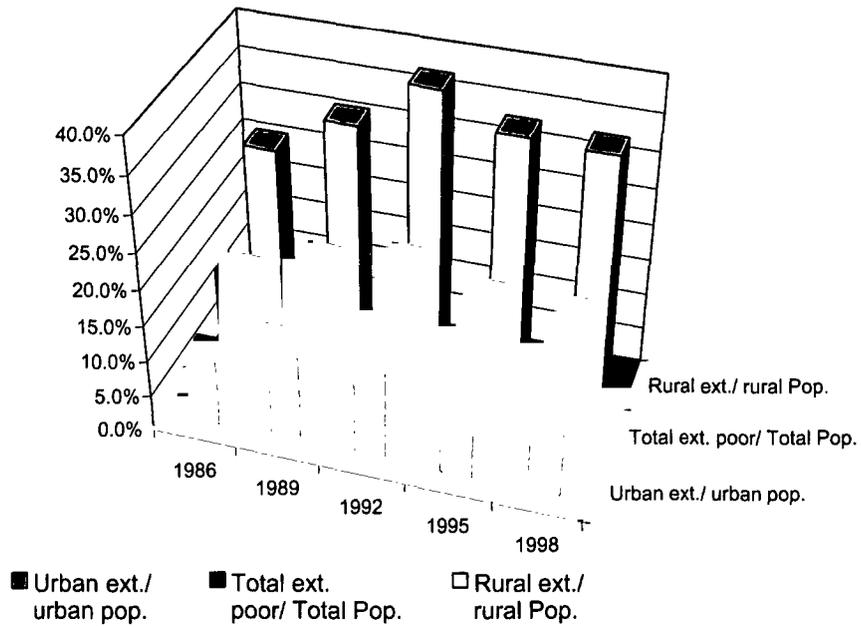


Figure A2.2 Incidence of poverty—national, rural and urban

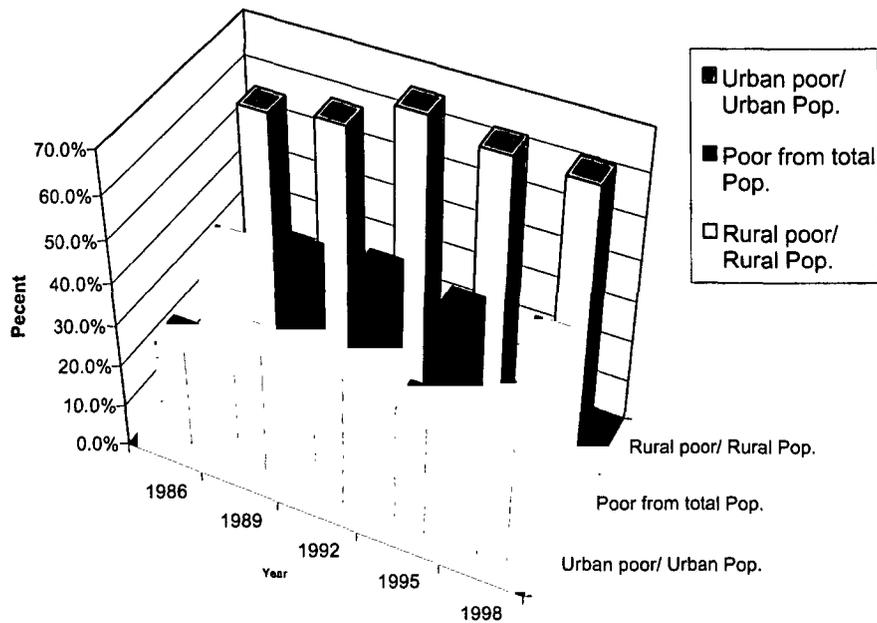
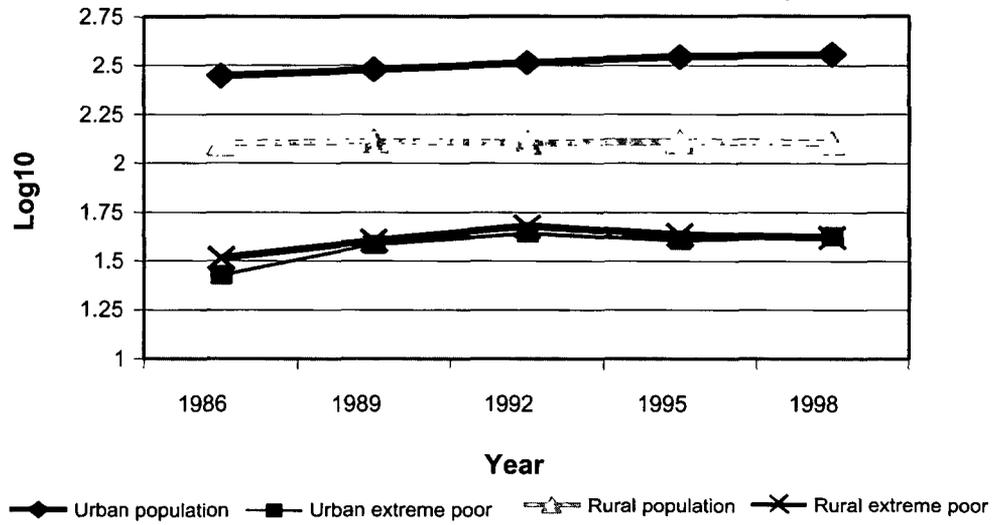


Figure A2.3 Trends of extreme poverty in Latin America & the Caribbean



Social Indicators: Rural vs. Urban

Table A2.6 Access to electricity, water, and telephone by country, 1986-96

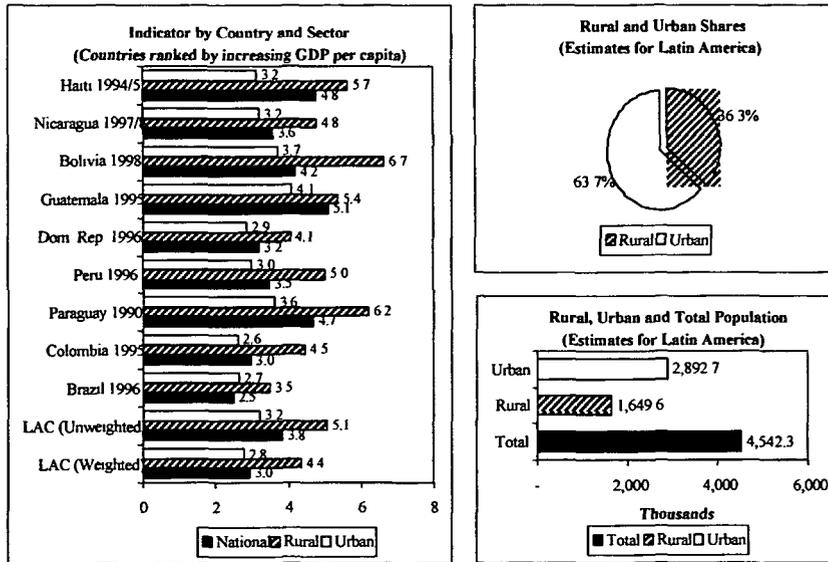
<i>Country/ Year</i>	<i>National</i>			<i>Urban</i>			<i>Rural</i>			<i>PCGDP in 1995 US\$ GDP</i>	<i>Expanded sample size(Millio ns) Survey pop.</i>	<i>% of pop.</i>
	<i>Electricity</i>	<i>Water</i>	<i>Phone</i>	<i>Electricity</i>	<i>Water</i>	<i>Phone</i>	<i>Electricity</i>	<i>Water</i>	<i>Phone</i>			
Bolivia												
1996	66.5	60.5		93.9	83.4		25.0	25.7		921.3	4.6	60.3
Brazil												
1986	81.1	67.7		95.8	82.8		41.7	27.3		4278.5	135.6	98.3
1989	85.1	70.8		96.9	83.6		51.2	33.7		4333.1	144.1	99.0
1995	90.7	78.3	20.5	98.4	88.6	25.1	61.6	39.5	3.3	4417.5	152.4	95.7
1996	91.9	81.6	23.6	98.7	91.3	28.6	67.2	46.5	5.2	4480.3	154.4	95.7
Chile												
1992	87.7	86.1		94.3	97.5		59.1	36.5		3502.1	13.5	98.0
1998	96.8	90.2	14.3	99.6	99.3	16.4	80.7	37.1	2.0	4419.2	14.5	100.5
Columbia												
1995	94.6	84.2	39.5	99.7	97.8	62.3	87.2	65.0	6.9	2407.2	20.2	54.9
1996	91.7	81.7	39.9	98.9	97.9	60.4	80.6	56.8	8.3	2410.2	23.4	62.4
El Salvador												
1995	74.3	44.5	14.1	94.7	66.9	25.4	49.8	17.4	0.4		3.2	54.9
1996	75.7	47.8	16.7	94.9	69.2	30.1	52.4	21.9	0.4		3.2	54.6
Guatemala												
1989	50.1	53.1		88.0	80.0		27.7	37.2			5.8	65.2
1999	61.2	61.2		90.3	88.8		42.3	43.2			10.5	94.8
Honduras												
1989	41.6	66.6		89.6	88.6		18.3	55.9		700.1	4.5	90.2

Table A2.6 Access to electricity, water, and telephone by country, 1986-96

Country/ Year	National			Urban			Rural			PCGDP in 1995 US\$ GDP	Expanded sample size(Millio ns) Survey pop.	% of pop.
	Electricity	Water	Phone	Electricity	Water	Phone	Electricity	Water	Phone			
1992	55.5	87.0		88.4	92.5		31.6	83.1		699.1	5.0	91.7
1995	53.3			86.2			28.1			698.3	5.3	91.8
1996	59.3	87.3		94.8	96.7		31.7	80.0		703.6	5.6	91.0
Mexico												
1984	87.3	79.3	15.8	95.2	89.1	23.4	73.7	62.6	2.8	3758.4	76.0	104.0
1989	89.2	78.1	18.2	97.2	90.9	27.9	76.1	57.5	2.6	3924.3	78.7	96.3
1992	91.3	77.5	21.5	97.2	88.0	29.5	75.5	49.6	0.4	4212.8	84.1	96.9
1994	93.5	79.6	25.8	97.6	89.6	35.2	82.4	52.6	0.6	4323.4	89.4	99.3
1996	93.1	83.1	26.5	97.5	92.1	35.7	81.5	59.1	2.0	4118.0	92.6	99.4
Republica Boliviarana de Venezuela												
1986	95.2	90.6		99.4	97.0		78.7	65.5		3496.1	17.9	101.7
1989	97.1	91.5		99.5	96.6		84.7	65.6		3245.7	19.4	101.8
1992	97.9	93.1		99.6	97.6		88.7	68.5		3725.4	20.4	99.6
1995	99.5	93.0		99.6	97.7		95.1	71.3		3537.2	21.9	100.0
1996	98.5	92.1		99.5	97.0		94.1	72.3		3449.4	22.3	100.0

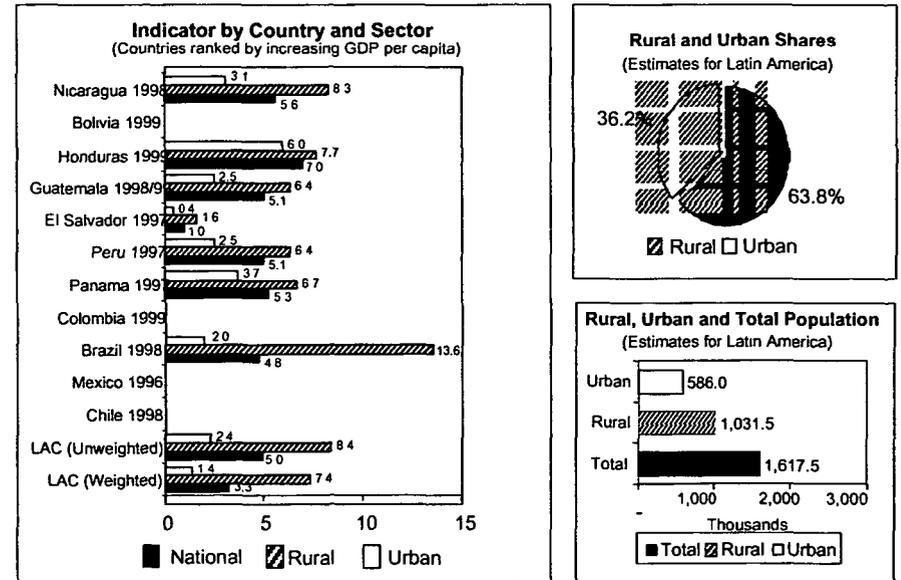
Source: Wodon, Quentin. 2000. Regional study - Concept paper: "Public Spending And The Poor In LAC". Mimeograph.

Figure A2.4 Total fertility rate (TFR)



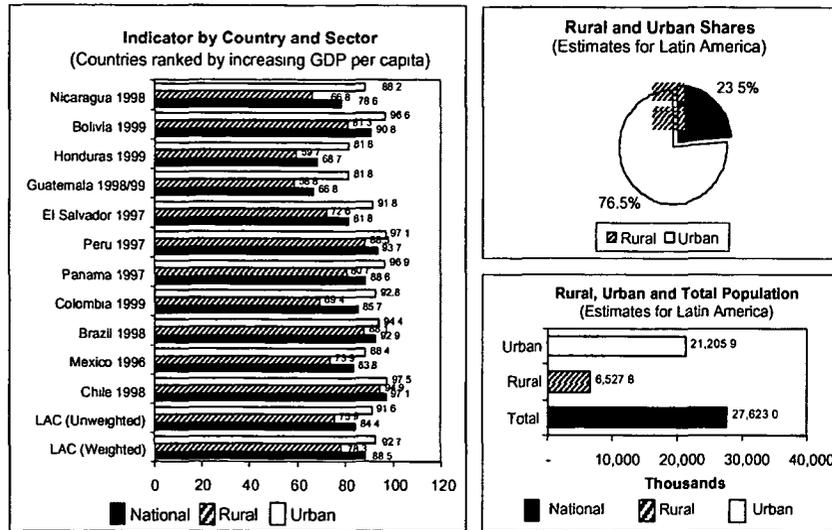
Note: TFR = The average number of births a woman could expect to have during her lifetime if she followed observed levels of fertility for her age group at every age.
 Source: Country-level data from Gwatkin and others (2000). GDP per capita ranking based on Purchasing Power Parity comparisons from the World Bank. Own estimates for Latin America and the Caribbean (LAC) using demographic and geographic information from Demographic Bulletin N° 63, January 1999, CEPAL. Weighted average for LAC based on country population weights.

Figure A2.5 Working last week among 6 to 11 years old



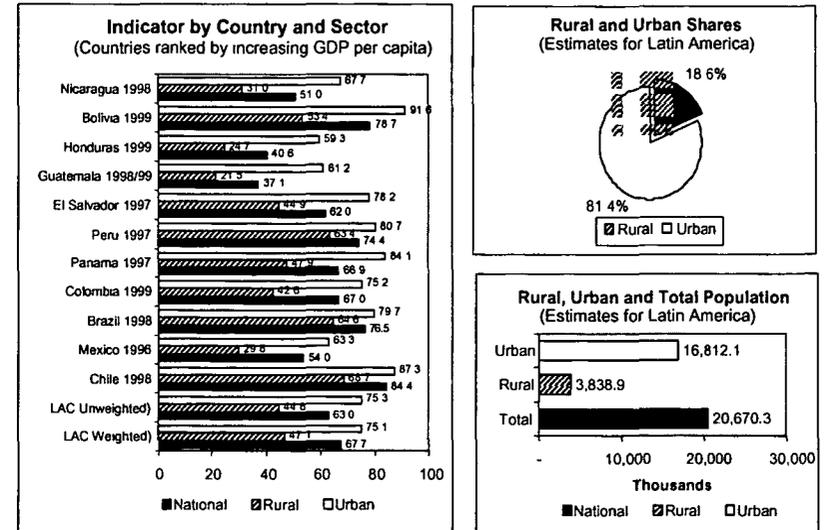
Note: Figure represents the proportion of individuals in the corresponding age bracket who held a job at the time of the interview
 Sources: Own estimates based on household surveys. GDP per capita ranking based on Purchasing Power Parity comparisons from the World Bank. Own estimates for Latin America and the Caribbean (LAC) using demographic and geographic information from Demographic Bulletin N° 63, January 1999, CEPAL. Weighted average for LAC based on country population weights.
 Wodon, Quentin. 2000. Addendum to the Concept Paper for the Regional study on Public Spending and the Poor.

Figure A2.6 Enrollment among 12 to 14 years old



Source: Own estimates based on household surveys. GDP per capita ranking based on Purchasing Power Parity comparisons from the World Bank. Latin America and the Caribbean (LAC) demographic and geographic information from Demographic Bulletin N° 63, January 1999, CEPAL. Weighted average for LAC based on country population weights.

Figure A2.7 Enrollment among 15 to 17 years old



Note: Figure represents proportion of individuals in the corresponding age bracket who attend school
 Sources: Own estimates based on household surveys. GDP per capita ranking based on Purchasing Power Parity World Bank Latin America and the Caribbean (LAC) demographic and geographic information from Demographic Bulletin N° 63 January 1999, CEPAL. Weighted average for LAC based on country population.
 Wodon, Quentin. 2000. Addendum to the Concept Paper for the Regional study on Public Spending and the Poor.

Inequality

Figure A2.8 Income inequality in 1986 and 1996

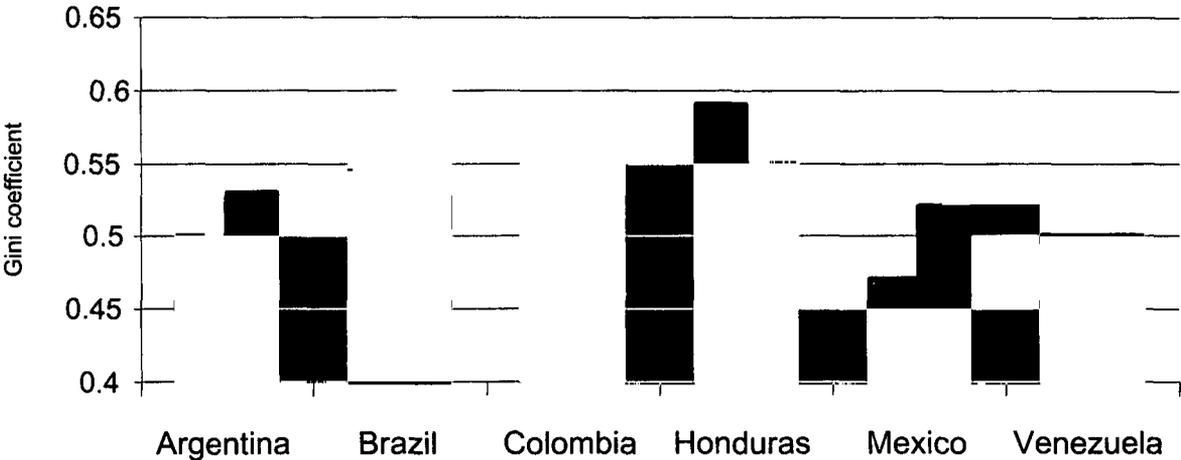
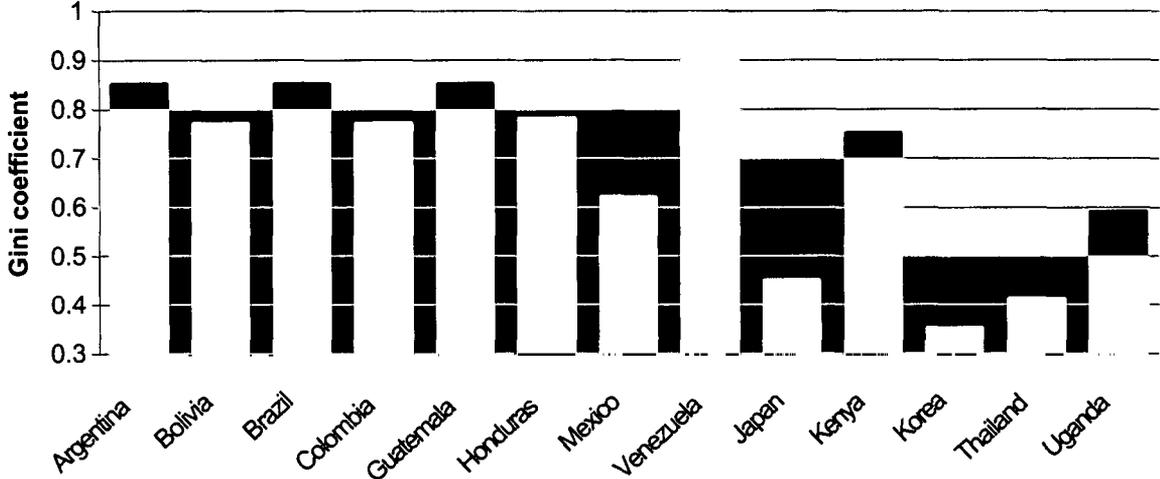


Figure A2.9 Land inequality around 1980



Population

This summary table shows the highly urbanized nature of the region but the near constancy in absolute numbers in the size of the rural population.

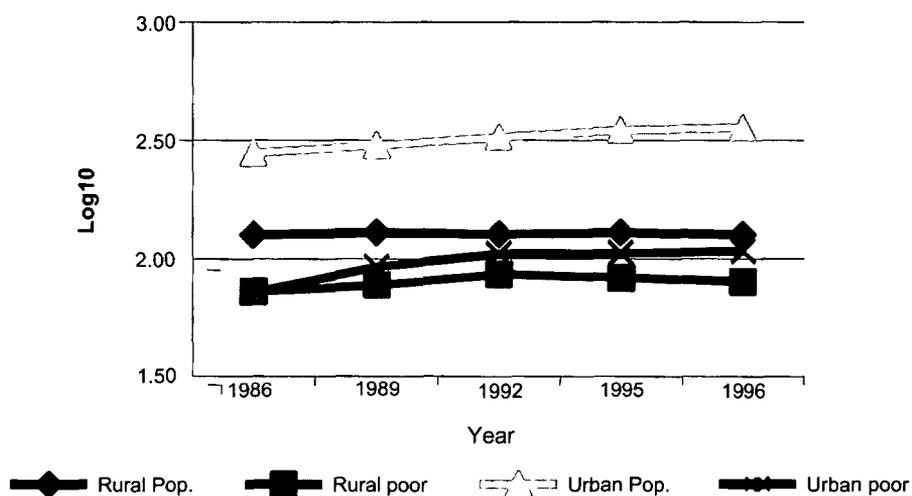
Table A2.7 Population projection for Latin America and the Caribbean Region
(in thousands)

<i>Indicator</i>	<i>2000</i>	<i>2005</i>	<i>2010</i>	<i>2015</i>	<i>2020</i>	<i>2025</i>	<i>2030</i>
Total Population	519,141	557,649	595,036	631,115	665,092	696,657	725,535
Rural Population	127,803	127,587	127,102	126,414	125,504	123,655	121,062
% of total	24.6	22.9	21.4	20.0	18.9	17.7	16.7
Urban Population	391,339	430,065	467,935	504,700	539,586	573,002	604,478
% of total	75.4	77.1	78.6	80.0	81.1	82.3	83.3

Source: FAO. 2000. <http://apps.fao.org/lim500/nph-wrap.pl?Population.LTS&Domain=SUA&Language=english>

Note that 75:25 urban:rural population split in year 2000 becomes 81:19 in 2020. In this 20-year period, the absolute numbers of rural however remains roughly similar at around 126 million from 127.8 million to 125.5 million.

Figure A2.10 Trends in population and poverty in rural and urban areas



Note that projections from two different sources (CEPAL, UN) yield approximately similar numbers. The rural/urban breakdown in population numbers by country and by sub-regional groupings shows that, among other things: (a) Central America which is now more rural and poorer will continue to be more rural; (b) the decrease in Mexico's rural population at 3.6 percent diverge from the 7.6 percent regional average. The absolute numbers of rural peoples in Mexico will remain roughly similar: from 25.3 million (2000) to 24.4 million (2030); (c) Brazil is different: the absolute numbers of rural will decrease from 31 to 25 million.

Table A2.8 Projected total, urban & rural population by sub-region

	2000	2005	2010	2015	2020	2025	2030	Change
Total Population								
Latin America and the Caribbean	519,143	557,652	595,037	631,115	665,093	696,658	725,536	40%
Caribbean	38,139	40,073	41,983	43,853	45,618	47,287	48,737	28%
Central America	135,222	146,909	158,112	168,858	179,052	188,504	197,204	46%
South America	345,782	370,670	394,942	418,405	440,423	460,866	479,595	39%
Rural Population								
Latin America and the Caribbean	128,275	128,100	127,628	126,931	125,971	124,126	121,534	-5.3%
Caribbean	14,121	14,100	14,011	13,861	13,639	13,358	12,996	-8.0%
Central America	44,296	46,406	47,848	48,634	48,758	48,310	47,522	7.3%
South America	69,857	67,594	65,769	64,437	63,574	62,458	61,016	-12.7%
Urban Population								
Latin America and the Caribbean	390,868	429,552	467,408	504,184	539,122	572,532	604,002	54.5%
Caribbean	24,018	25,973	27,973	29,992	31,978	33,929	35,742	48.8%
Central America	90,926	100,503	110,263	120,224	130,294	140,195	149,682	64.6%
South America	275,925	303,076	329,172	353,968	376,850	398,408	418,579	51.7%

Source: United Nations Population Division, Department of Economic and Social Affairs: *World Population Prospects: The 1999 Revision*.

Table A2.9 Projected total population by region, sub-region and country, 2000-2030

(in thousands)

Country/Region	2000	2005	2010	2015	2020	2025	2030	Change
Latin America and the Caribbean	519,143	557,652	595,037	631,115	665,093	696,658	725,536	40%
Caribbean	38,139	40,073	41,983	43,853	45,618	47,287	48,737	28%
Central America	135,222	146,909	158,112	168,858	179,052	188,504	197,204	46%
Belize	241	267	294	318	344	370	396	64%
Costa Rica	4,023	4,453	4,857	5,232	5,592	5,929	6,238	55%
El Salvador	6,276	6,875	7,441	7,977	8,534	9,062	9,554	52%
Guatemala	11,385	12,951	14,631	16,385	18,123	19,816	21,441	88%
Honduras	6,485	7,346	8,203	9,044	9,865	10,656	11,392	76%
Mexico	98,881	106,147	112,891	119,178	124,976	130,196	134,912	36%
Nicaragua	5,074	5,800	6,529	7,271	7,997	8,696	9,353	84%
Panama	2,856	3,067	3,266	3,451	3,622	3,779	3,918	37%
South America	345,782	370,670	394,942	418,405	440,423	460,866	479,595	39%
Argentina	37,032	39,302	41,474	43,498	45,347	47,160	48,896	32%
Bolivia	8,329	9,275	10,229	11,219	12,193	13,131	14,000	68%
Brazil	170,115	180,638	190,875	200,697	209,734	217,930	225,161	32%
Chile	15,211	16,136	17,010	17,912	18,774	19,548	20,240	33%
Colombia	42,321	46,039	49,665	53,183	56,569	59,758	62,695	48%
Ecuador	12,646	13,798	14,899	15,936	16,904	17,796	18,641	47%
Peru	25,662	27,804	29,885	31,876	33,757	35,518	37,201	45%

Table A2.10 Projected rural population by region, sub-region and country, 2000-2030

(in thousands)

	2000	2005	2010	2015	2020	2025	2030	Change
Latin America and the Caribbean	128,275	128,100	127,628	126,931	125,971	124,126	121,534	-5.3%
Caribbean	14,121	14,100	14,011	13,861	13,639	13,358	12,996	-8.0%
Central America	44,296	46,406	47,848	48,634	48,758	48,310	47,522	7.3%
Belize	110	113	115	114	115	115	115	4.5%
Costa Rica	2,099	2,258	2,372	2,438	2,463	2,444	2,405	14.6%
El Salvador	3,349	3,533	3,649	3,700	3,708	3,685	3,632	8.5%
Guatemala	6,870	7,605	8,273	8,821	9,178	9,423	9,557	39.1%
Honduras	3,065	3,134	3,182	3,228	3,288	3,316	3,309	8.0%
Mexico	25,328	26,038	26,345	26,292	25,907	25,217	24,424	-3.6%
Nicaragua	2,226	2,431	2,595	2,720	2,794	2,837	2,849	28.0%
Panama	1,249	1,294	1,318	1,321	1,305	1,272	1,231	-1.4%
South America	69,857	67,594	65,769	64,437	63,574	62,458	61,016	-12.7%
Argentina	3,733	3,504	3,334	3,217	3,150	3,077	2,998	-19.7%
Bolivia	3,126	3,222	3,294	3,358	3,407	3,425	3,409	9.1%
Brazil	31,846	29,747	28,181	27,133	26,553	25,847	25,026	-21.4%
Chile	2,181	2,128	2,072	2,025	1,979	1,932	1,877	-13.9%
Colombia	11,048	11,123	11,130	11,090	11,022	10,882	10,674	-3.4%
Ecuador	4,384	4,195	4,015	3,862	3,750	3,688	3,609	-17.7%
Peru	6,988	7,068	7,088	7,055	6,979	6,861	6,717	-3.9%

Table A2.11 Projected urban population by region, sub-region and country, 2000-2030

(in thousands)

	2000	2005	2010	2015	2020	2025	2030	Change
Latin America and the Caribbean	390,868	429,552	467,408	504,184	539,122	572,532	604,002	54.5%
Caribbean	24,018	25,973	27,973	29,992	31,978	33,929	35,742	48.8%
Central America	90,926	100,503	110,263	120,224	130,294	140,195	149,682	64.6%
Belize	131	154	180	204	229	255	281	114.5%
Costa Rica	1,925	2,195	2,485	2,794	3,129	3,484	3,833	99.1%
El Salvador	2,927	3,342	3,792	4,278	4,826	5,377	5,922	102.3%
Guatemala	4,515	5,347	6,358	7,564	8,945	10,394	11,884	163.2%
Honduras	3,420	4,213	5,021	5,817	6,577	7,340	8,083	136.3%
Mexico	73,553	80,110	86,546	92,887	99,069	104,979	110,488	50.2%
Nicaragua	2,848	3,369	3,934	4,552	5,203	5,859	6,504	128.4%
Panama	1,606	1,773	1,948	2,130	2,317	2,507	2,687	67.3%
South America	275,925	303,076	329,172	353,968	376,850	398,408	418,579	51.7%
Argentina	33,299	35,798	38,140	40,281	42,197	44,083	45,898	37.8%
Bolivia	5,203	6,053	6,936	7,861	8,787	9,707	10,591	103.6%
Brazil	138,269	150,891	162,694	173,564	183,181	192,083	200,135	44.7%
Chile	13,031	14,008	14,938	15,887	16,795	17,616	18,363	40.9%
Colombia	31,274	34,916	38,535	42,093	45,547	48,876	52,021	66.3%
Ecuador	8,262	9,603	10,884	12,074	13,154	14,108	15,032	81.9%
Peru	18,674	20,736	22,798	24,821	26,778	28,657	30,485	63.2%

Note the annual rate of change of the rural population is negative for the whole region except for Nicaragua (at 0.08) and Guatemala (0.28), the very countries where the projected percentage population growth is well above the

regional (40) and sub-regional average (46). Thus for Nicaragua, the population growth from 2000 to 2030 is 84 percent, for Guatemala it is 88 percent. These are some of the more rural, and poorer countries today. Their rural populations are projected to grow by 28 percent, and 39 percent respectively, well above the sub-regional average of 7.3 percent. For the Central America sub-region as a whole, the rural population will grow by 7.3 percent, while it will decrease by 12.7 percent for South America, and by 5.3 percent for LAC.

Urban population is projected to increase by nearly 55 percent from year 2000 to 2030. This high growth combined with the negative rural growth clearly shows that the blurring of rural/urban divide will continue.

Table A2.12 Average annual rate of change of the rural population by sub-region & country

	2000-2005	2005-2010	2010-2015	2015-2020	2020-2025	2025-2030
Latin America and the Caribbean	-0.03	-0.07	-0.11	-0.15	-0.30	-0.42
Caribbean	-0.03	-0.13	-0.22	-0.32	-0.42	-0.55
Central America	0.93	0.61	0.33	0.05	-0.18	-0.33
Belize	0.46	0.33	-0.04	0.05	0.11	-0.04
Costa Rica	1.46	0.98	0.55	0.20	-0.15	-0.32
El Salvador	1.07	0.65	0.28	0.04	-0.12	-0.29
Guatemala	2.03	1.68	1.28	0.79	0.53	0.28
Honduras	0.44	0.30	0.29	0.37	0.17	-0.04
Mexico	0.55	0.23	-0.04	-0.29	-0.54	-0.64
Nicaragua	1.77	1.30	0.94	0.54	0.31	0.08
Panama	0.70	0.37	0.05	-0.25	-0.52	-0.65
South America	-0.66	-0.55	-0.41	-0.27	-0.35	-0.47
Argentina	-1.26	-1.00	-0.72	-0.42	-0.46	-0.52
Bolivia	0.61	0.44	0.38	0.29	0.11	-0.09
Brazil	-1.36	-1.08	-0.76	-0.43	-0.54	-0.65
Chile	-0.48	-0.53	-0.47	-0.46	-0.48	-0.58
Colombia	0.14	0.01	-0.07	-0.12	-0.26	-0.39
Ecuador	-0.88	-0.88	-0.78	-0.59	-0.33	-0.43
Peru	0.23	0.06	-0.09	-0.22	-0.34	-0.42

Taxonomy of the Region: Agriculture and the Rural Non-Farm Economy

This section should be read in conjunction with the population figures in the next section to show the different agrarian and population structures of these economies.

Table A2.13 Agricultural value added as percent of GDP for selected countries

Country	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Trinidad & Tobago	2.3	2.3	2.2	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Mexico	5.0	5.5	5.0	4.9	4.8	4.7	4.6	4.5	4.4	4.4	4.3
Venezuela	5.2	4.2	4.5	5.0	5.1	5.1	5.1	5.1	5.1	5.1	5.1
Argentina	5.7	6.0	5.6	5.7	6.4	6.6	6.7	6.8	6.9	6.9	6.9
Brazil	9.0	8.3	7.9	8.4	8.6	8.3	8.3	8.3	8.3	8.2	8.2
St. Lucia	10.2	10.3	8.6	8.1	8.2	8.2	8.2	8.2	8.1	8.2	8.4
Chile	9.2	9.0	8.4	8.4	9.1	8.9	8.9	8.9	8.9	9.0	9.0
Uruguay	9.5	8.9	8.5	8.5	9.1	9.0	8.9	8.9	9.0	9.1	9.1
Jamaica	9.1	8.3	8.0	8.0	8.2	8.4	8.6	8.8	9.1	9.3	9.5
El Salvador	13.4	12.9	13.3	12.1	10.4	10.4	10.4	10.4	10.4	10.3	10.2
Dominican Republic	12.7	12.9	12.4	11.6	11.5	11.2	11.0	10.9	10.8	10.7	10.6
Ecuador	11.9	11.9	12.1	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Bolivia	16.3	16.2	17.1	15.4	15.7	15.4	15.0	14.4	14.0	13.7	13.3
Colombia	15.3	14.0	14.1	14.5	15.5	15.5	15.7	15.8	15.7	15.5	15.5
Honduras	21.5	22.3	23.3	20.3	18.2	17.3	16.8	16.5	16.4	16.4	16.3

Table A2.13 Agricultural value added as percent of GDP for selected countries

<i>Country</i>	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Guyana	41.2	38.9	35.4	34.7	23.7	21.6	21.4	21.4	21.6	22.0	22.5
Belize	20.3	20.8	19.6	18.7	14.4	14.6	15.9	17.2	18.7	20.8	22.8
Nicaragua	33.3	34.0	33.9	34.1	25.8	24.3	23.9	23.8	24.2	24.7	25.1

Source: FAO. 2000. Ibid.

Table A2.14 Share of agricultural export from total GDP of Latin America & the Caribbean region in 1995

billion US\$ 1995 constant market prices

<i>Indicator</i>	1990	1991	1992	1993	1994	1995	1996	1997
Total Agricultural Products Exports	30.7	30.4	32.0	31.5	33.6	37.1	36.9	43.2
GDP	1456.5	1520.9	1571.8	1637.3	1722.9	1740.6	1804.3	1897.4
Share of Agriculture	2.1%	2.0%	2.0%	1.9%	1.9%	2.1%	2.0%	2.3%

Source: Computed based on data from SIMA

**Table A2.15: Share of agricultural exports¹ from total exports²
(value share in %)**

<i>Country</i>	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998
Nicaragua	47.2	40.3	30.1	39.0	35.6	38.7	53.7	50.3	42.6	41.7	57.3
Ecuador	18.5	25.8	39.5	50.7	45.0	41.3	48.8	45.8	42.9	51.5	56.1
Guatemala	44.2	55.3	23.0	21.7	24.5	42.9	38.8	42.3	40.9	39.8	37.7
Costa Rica	48.8	61.1	38.6	41.3	32.5	34.5	41.9	43.6	42.6	39.7	33.1
Colombia	67.8	59.3	31.1	32.0	32.3	29.5	35.5	29.0	25.7	29.6	28.5
Argentina	36.3	43.3	27.3	29.5	30.0	26.4	24.8	24.1	25.4	22.3	23.7
Chile-	7.8	14.8	17.3	18.0	18.2	19.6	17.5	15.3	16.7	15.7	18.2
El Salvador	26.2	52.3	5.0	5.9	8.3	32.6	25.4	27.4	23.1	24.3	16.1
Paraguay	40.5	54.8	47.2	44.0	17.7	14.0	12.8	11.6	14.5	16.4	15.3
Uruguay	13.5	19.5	14.8	14.6	13.2	13.9	13.7	16.9	13.0	15.7	14.0
Honduras	55.9	60.5	37.6	35.9	48.5	48.1	38.3	37.7	31.2	32.0	14.0
Brazil	6.9	18.2	11.0	10.8	9.6	9.1	11.6	9.6	10.0	13.5	12.3
Bolivia	3.6	2.9	14.6	11.9	7.7	7.4	10.8	11.8	13.5	14.9	11.1
Peru	7.1	10.0	7.3	8.1	6.1	6.6	9.3	10.4	9.0	11.2	10.2
Mexico	8.4	6.4	6.0	6.2	5.2	5.5	5.1	5.8	4.3	4.0	3.7
Venezuela	0.2	3.1	1.1	1.1	1.1	1.3	1.3	0.9	0.9	1.0	1.3
Total	13.5	17.4	12.5	13.2	12.3	11.9	13.0	12.3	11.3	11.9	11.4

Source: CEPAL. 1999. Statistical Yearbook for Latin America and the Caribbean.

1. Agriculture includes hunting, forestry and fishing. 2. Value of exports FOB of goods. Figure for Mexico includes goods for processing (maquila) from 1992 onwards.

Table A2.16 Economic importance of the agricultural sector in Latin America & the Caribbean region 1975-1996 (Gross agricultural product (% of total GDP))

<i>Country</i>	<i>1975</i>	<i>1980</i>	<i>1985</i>	<i>1990</i>	<i>1996</i>	<i>Value for 1996 (US\$ millions)</i>
Latin America & the Caribbean	11.3	7.7	8.4	8.3	8.0	146,695
Haiti	45.2	32.9	32.8	33.2	36.6	785
Nicaragua	23.4	28.4	30.2	31.0	33.7	672
Paraguay	34.7	25.0	26.9	27.8	26.9	2,594
Guatemala	28.0	24.8	25.9	25.9	24.1	3,798
Honduras	29.3	19.4	19.6	20.0	19.8	811
Colombia	25.2	17.4	16.5	16.2	14.2	12,174
Ecuador	23.0	10.5	10.9	13.4	13.0	2,471
Uruguay	15.2	11.5	13.2	11.3	12.1	2,314
Mexico	9.6	8.3	8.6	7.8	7.4	24,823
Brazil	8.3	6.2	7.1	6.8	7.2	55,898

Source: Quiroz, J. A. 2000. Agriculture and the Macroeconomy in Latin America During the Nineties, <http://www.iadb.org/>.

The relative importance of agriculture varies from 1 to 25 percent of GDP in the region, with shares in major countries like Argentina, Brazil, Chile and Mexico below 9 percent in 2000. This sharp variation among countries is not apparent at aggregate levels. Also, note that agriculture here refers to primary agriculture, not to agro-business upstream and downstream and not to the rural non-farm economy which is listed separately.

Note that even for large countries where agriculture as a percentage of GDP is below 9 percent, agricultural exports as a share of total exports is significant (and therefore important as a factor in the competitiveness of the country); e.g., Brazil at 12 percent, Chile at 18 percent, and Argentina at 23 percent. Again, the relative importance of agricultural exports does not show at an aggregate level.

Table A2.18 Non-agricultural income or rural non-farm income (RNFI) in total rural income

<i>Country</i>	<i>Year of survey</i>	<i>Share of RNFI (%)</i>	<i>Source</i>
Brazil	1997	39	Da Silva and Del Grossi, 1999
Chile	1997	41	Berdegue et al., 1999
Colombia	1997	50	Echeverri, 1999
Costa Rica	1989	59	Weller, 1997
Ecuador	1995	41	Elvers and Lanjousw, 2000
El Salvador	1995	38	Lanjouw, 1998
Haiti	1996	68	Wiens and Sobrado, 1998
Honduras	1990	38	Weller, 1997
Mexico	1997	55	De Janvry and Sadoulet, 1999
Nicaragua	1998	42	Corral and Reardon
Panama	1997	50	Wiens, et. al. 1999
Peru	1997	50	Escobal et. al. 1998

Source: Berdegue, J. A. et. al. 2000. Empleo e Ingreso Rural no Agrícola en América Latina y el Caribe.

Table A2.17 Share of agriculture from GDP of Latin America & the Caribbean region

Agriculture (value added) and GDP (at market prices) constant 1995 Million US \$

<i>Year</i>	<i>Agriculture</i>	<i>GDP</i>	<i>Agriculture share in %</i>
1990	116,653.0	1,451,219.0	8
1991	119,575.0	1,515,335.0	7.9
1992	122,525.0	1,566,137.0	7.8
1993	123,003.0	1,631,422.0	7.5
1994	124,677.0	1,716,729.0	7.3
1995	129,412.0	1,734,121.0	7.5
1996	132,939.0	1,797,576.0	7.4
1997	134,436.0	1,890,385.0	7.1
1998	136,900.0	1,929,823.0	7.1
1999	137,954.0	1,920,510.0	7.2

Source: Computed from SIMA.

Table A2.19 Trends in rural non-farm employment in Latin America & the Caribbean

'000

<i>County</i>	<i>Year</i>	<i>RNFE household</i>	<i>Year</i>	<i>RNFE household</i>
Bolivia	1976	227	1988	257
Brazil	1970	1582	1980	2630
Chile	1970	193	1982	193
Colombia	1964	310	1973	476
Costa Rica	1973	131	1984	194
Cuba	1970	355	1981	405
Ecuador	1974	294	1990	537
El Salvador	1971	88	1975	128
Guatemala	1964	129	1973	173
Haiti	1971	291	1982	356
Honduras	1974	81	1988	180
Mexico	1970	909	1980	1365
Nicaragua	1950	21	1971	51
Panama	1970	55	1980	91
Paraguay	1972	88	1982	136
Peru	1972	245	1981	297
Uruguay	1975	63	1985	49
Venezuela	1971	276	1981	347
Total		5338		7865

Source: Berdegue, J. A. et. al. Ibid. p. 6.

These are partial indicators of the importance of the RNFE. The RNFE is not measured as a sector in the national income accounts. Consequently, its role is underestimated in the national income accounts.

Appendix 3 The Rural Portfolio in the Latin America & the Caribbean Region

Introduction

The purpose of this Appendix is to learn from the rural portfolio in LCR and to identify strengths and weaknesses in the implementation of rural development lending operations. The review of the portfolio highlights five aspects of interest in the formulation of a rural development strategy.

- One, is the multi-sectoral nature of the “rural” agenda. The many sectors that operate in rural space highlight the challenge of coordination to achieve synergism.
- Two, is the fact that the lending is sharply declining and erratic in LCSEER, via which the bulk of the lending for “rural” in LCR is channeled. The entire “rural” Bank lending also experienced a sharp decline since the 1970s.
- Three, is the importance of community-driven projects in the portfolio. These are projects in which the funds are either allocated directly to communities to decide how to spend for development, or with strong community participation in the preparation and implementation of priority actions.
- Four, the way rural issues are integrated in the Country Assistance Strategy documents has been very uneven across countries.
- Five, while there are important opportunities for higher impact through scaling up and expansion of existing successful initiatives, there are important gaps with respect to the new agenda proposed in the Action Plan. This would require a revisiting of the focus and skill-mix.

Major components of the project portfolios in “rural”. The above “rural” portfolios contain three categories of interventions to assist the rural poor. In descending order in terms of their relative share in the LCSEER lending commitment portfolio, these are (a) “focused actions”; (b) “inclusive actions”; and (c) “enabling actions”.⁴⁰ The first is focused on the rights, interests and needs of poor people. The second are broad-based actions that improve opportunities and services generally. The third support the policies that shape the enabling context for poverty reduction and elimination. In the LCSEER portfolio of 43 projects, direct poverty reduction projects in the first two categories are the majority. Here fall most of the community-based and poverty alleviation projects, land/soil management projects; and interventions at the regional or micro-catchment levels. Other projects address issues of land administration and land reform; natural resource management—soils, watersheds; and of technology transfer to small farmers. HD also focuses on the first two categories; e.g., targeted transfers, delivery of primary education and health services, and small infrastructure. The same is true of FP; e.g., rural water supply and sanitation, and rural roads, involving local communities, municipalities and central governments.

A multi-sectoral approach to lending

“Rural” lending operations are channeled through five management units. The budget allocated to “rural” is channeled through LCSES (made up of ER, EN, and EO), and to LCSHD, and LCSFP, as the following table shows. The multi-sectoral nature emphasizes the need for coordination/collaboration to achieve synergism in rural development.

LCSHD portfolio. The HD portfolio currently consists of 85 projects under supervision: 43 projects in Education, 29 projects in Health, and 13 projects in Social Protection. Of these projects, approximately 52 are fully or partially targeted to rural areas, accounting for about 61 percent of the total HD projects, and about \$1,410.76 million of loan proceeds, or 22 percent of total HD lending.

⁴⁰ These are categories used in the RDV portfolio analysis.

Table A3.1 Latin America & the Caribbean human development portfolio in fiscal year 2001

	<i>Social Protection</i>	<i>Health</i>	<i>Education</i>	<i>Total</i>
Total number of human development projects	13	29	43	85
Total amount of human development lending portfolio (US\$ million)	735.1	2,504	3,297.2	6,536.3
# of projects targeted to rural areas	10	17	25	52
Total loan amount targeted to rural (US\$ million)	625.3	832.8	1,157.9	2,616
Loan amount targeted to rural –adjusted	324.3	491.75	594.71	1,410.76

Note: The figures above do not include lending in peri-urban areas.

LCSFP portfolio. With a total of 197 activities programmed for FY01, LCSFP's portfolio of projects spreads over six different sector clusters: Energy, Finance, Private Sector Development, Transport, Urban, and Water. Four of these clusters include activities with a significant focus on rural issues, for a total of 18 activities (9.1 percent of total) including three sector work pieces (AAA), the preparation of seven new lending operations (LEN), and eight projects under supervision (SPN). Table A3.2 below presents the number of LCSFP's FY01 activities counted by cluster and by type. It also shows the distribution of activities with a significant rural focus.

Table A3.2 Finance, Private Sector, and Infrastructure Activities in Latin America & the Caribbean for fiscal year 2001

<i>Cluster</i>	<i>Analytic and Advisory Activities</i>	<i>Lending</i>	<i>Supervision</i>	<i>Total</i>
Energy	2	2	14	18
Finance	12	4	11	27
PSD	10	4	18	32
Transport	2	11	41	54
Urban	8	3	19	30
Water	4	11	21	36
Totals	38	35	124	197
Activities with a Significant Rural Focus				
Number:	3	7	8	18
Percent of Total:	7.8	20.0	6.5	9.1

LCSFP's involvement in rural issues is small but increasing, with a much greater share of new lending preparation activities than of project supervision activities. However, there are only three sector work activities that are being funded in FY01. Overall, about 13 percent of LCSFP's budget for FY01 is allocated to these activities.

LCSEER declining and erratic lending. Table A3.3 shows a declining and erratic lending situation and the difficulties of planning medium to long term action for rural development. The share (out of total LCR lending commitments) of rural lending through LCSEER has fallen from 15 percent in FY95 to 3.3 in FY00 (with erratic year-to-year swings). From FY95

to 2000, commitments in LCSEER have fallen by 87 percent, from US \$914 million to US \$144 million (the corresponding figures for LCR are US \$6,062 to US \$4,317 million respectively, a 28.8 percent fall).

Table A3.3 LCSEER share from total LAC lending commitment

US\$ million

<i>Fiscal Year</i>	<i>LCSEER</i>	<i>Change from previous year (%)</i>	<i>LAC</i>	<i>Change from previous year (%)</i>	<i>LCSEER share in %</i>
1995	914		6,062		15.0
1996	262	-71.3	4,440	-26.8	5.9
1997	742	183.2	4,565	2.8	16.3
1998	317	-57.3	6,042	32.4	5.2
1999	551	73.8	7,737	28.1	7.1
2000	144	-73.9	4,317	-44.2	3.3

Source: World Bank Business Warehouse.

LCSER Portfolio. Table A3.4, A3.5 and A3.6 provide a detail picture of the lending and portfolio situation in LCSE⁴¹. Unfortunately the categorization that the system provides does not permit to properly classify the projects according to their strategic thrust. Therefore these tables provide a snapshot of the existing projects in the portfolio and lending but cannot be used to weigh their importance according to the different categories of projects. In particular the categories “agricultural adjustment” and “other agriculture” do not reflect the real nature of the projects listed. Project categorization is certainly an area that would merit more in the future attention so as to allow better analysis of the portfolio.

Table A3.4 LCSE⁴¹ projects approved during fiscal years 1995-2000
in US\$ million

<i>Fiscal year</i>	<i>Country</i>	<i>Proj ID</i>	<i>Project name</i>	<i>IBRD Commitment Amount</i>	<i>IDA Commitment Amount</i>	<i>IBRD/IDA Commitment Amount</i>
Agriculture Adjustment				\$785.40	\$ -	\$785.00
1997	Argentina	P006010	Provincial Agricultural Development I	\$ 125.00		\$ 125.00
1997	Brazil	P006475	Land Reform Pilot	\$90.00		\$90.00
1997	Peru	P042442	Sierra Natural Res.	\$51.00		\$51.00
1998	Argentina	P006041	Small Farmer Development	\$75.00		\$75.00
1999	Mexico	P048505	Agricultural Product	\$ 444.40		\$ 444.00
Agricultural Extension				\$ 39.00		\$ 39.00
1995	Venezuela	P008222	Agricultural Extension	\$39.00		\$39.00
Irrigation & Drainage				\$200.60	\$2.70	\$203.00
1995	Dominican Republic	P007020	Irrig Land & Watersh	\$28.00		\$28.00
1995	Mexico	P007607	Rainfed Areas Development	\$85.00		\$85.00
1996	St. Lucia	P039455	Wtrshd & Environ Mt	\$ 2.60	\$ 2.70	\$ 5.00
1997	Peru	P008037	Irrigation Rehabilitation	\$85.00		\$85.00
Livestock				\$ 44.00		\$ 44.00
1999	Brazil	P055388	Animal&Plant Dis. Co	\$44.00		\$44.00
Annual Crops				\$ 15.00		\$ 15.00
1996	Chile	P006676	Secano Ag Dev I	\$15.00		\$15.00
Research				\$141.60		\$142.00
1995	Colombia	P006880	Agriculture Technolo	\$51.00		\$51.00
1997	Brazil	P043873	Ag Tech Dev.	\$60.00		\$60.00
1997	Ecuador	P007131	Ag Research	\$21.00		\$21.00
2000	Peru	P047690	Res. & Extension	\$ 9.60		\$10.00
Forestry				\$121.00	\$9.00	\$130.00
1996	Argentina	P006040	Forestry/Dv	\$16.00		\$16.00
1999	Nicaragua	P052080	Forestry		\$ 9.00	\$ 9.00
Other Agriculture				\$874.00	\$ 53.60	\$928.00
1995	Brazil	P035717	Rural Poverty Alleviation – Bahia	\$ 105.00		\$ 105.00
1995	Brazil	P038884	Rural Poverty Alleviation – Ceara	\$70.00		\$70.00
1995	Brazil	P038885	Rural Poverty Alleviation – Sergipe	\$36.00		\$36.00

⁴¹ The Latin America and Caribbean Region, Environmentally and Socially Sustainable Development department (ESSD -- LCSES) is organized under three management units; i.e., LCSE⁴¹ (responsible for rural projects), LCSE⁰ (responsible for social projects) and LCSE^N (responsible for environment sector projects). Accordingly, the list of projects under LCSE^R does not include other rural projects managed by the other two units and therefore underestimates the total rural portfolio of the Region.

Table A3.4 LCSER projects approved during fiscal years 1995-2000
in US\$ million

<i>Fiscal year</i>	<i>Country</i>	<i>Proj ID</i>	<i>Project name</i>	<i>IBRD Commitment Amount</i>	<i>IDA Commitment Amount</i>	<i>IBRD/IDA Commitment Amount</i>
1996	Brazil	P037828	Rural Poverty Alleviation - Pr	\$175.00		\$175.00
1997	Brazil	P043871	Rural Poverty Alleviation – Piaui	\$30.00		\$30.00
1997	Brazil	P042566	R.Poverty(Pe)	\$ 39.00		\$ 39.00
1997	Brazil	P038896	Rural Poverty Alleviation - Rio Grande Do Norte	\$24.00		\$24.00
1997	Brazil	P043868	Rgs Land Mgt/Poverty	\$ 100.00		\$ 100.00
1997	Mexico	P007732	Rural Fin. Mkts T.A.	\$30.00		\$30.00
1997	Nicaragua	P007790	Rural Municipalities		\$ 30.00	\$30.00
1998	Brazil	P051701	Maranhao R.Poverty	\$80.00		\$80.00
1998	Brazil	P042565	Paraiba R.Poverty	\$60.00		\$60.00
1998	Mexico	P007711	Rural Dev. Marg.Area	\$47.00		\$47.00
1999	Guatemala	P054462	Land Fund	\$23.00		\$23.00
2000	Mexico	P057530	Rural Dev.Marg.Arii	\$55.00		\$55.00
2000	Nicaragua	P064915	Ag Techn & Rural Edu		\$ 23.60	\$24.00
Business Environment				\$500.00		\$500.00
1995	Mexico	P007702	Second Decentraliz.	\$ 500.00		\$ 500.00
Other Finance				\$ 50.00		\$ 50.00
2000	Brazil	P050776	NE Microfinance Development	\$50.00		\$50.00
Natural Resources Management				\$163.50	\$ 34.00	\$148.00
1996	El Salvador	P007174	Land Administrat.	\$50.00		
1997	Honduras	P007398	Rural Land Mgmt		\$ 34.00	\$34.00
1997	Panama	P007847	Rural Pov & Nat Res	\$22.50		\$23.00
1998	Brazil	P006474	Br Land Mgt 3 (Sao Paulo)	\$55.00		\$55.00
1999	Guatemala	P049616	Land Administrat.	\$31.00		\$31.00
2000	Colombia	P057326	Sierra Nevada Sust. Devel.	\$ 5.00		\$ 5.00
Total Commitment For Approved Projects				\$ 2,829.10	\$ 99.30	\$ 2,929.00

Source: Business Warehouse, December 12, 2000

Table A3.5 Projects under supervision in LCSER
in US\$ million

<i>Country, by Sector</i>	<i>Project ID</i>	<i>Project Name</i>	<i>Net Commitment</i>
Agriculture Adjustment			\$ 785.4
Argentina	P006010	Prov Ag Devt I	\$ 125.0
Argentina	P006041	Small Farmer Dv.	\$ 75.0
Brazil	P006475	Land Rfm Pilot	\$ 90.0
Mexico	P048505	Agricultural Product	\$ 444.4
Peru	P042442	Sierra Natural Res.	\$ 51.0
Agricultural Extension			\$ 79.0

Table A3.5 Projects under supervision in LCSE
in US\$ million

<i>Country, by Sector</i>	<i>Project ID</i>	<i>Project Name</i>	<i>Net Commitment</i>
El Salvador	P007167	Ag Sctr Reform & Inv – Prisa	\$ 40.0
Venezuela	P008222	Ag Ext	\$ 39.0
Fisheries & Aquaculture			\$ 5.0
Argentina	P057459	Sustainable Fisheries Management Project	\$ 5.0
Irrigation & Drainage			\$ 343.7
Dominican Repub	P007020	Irrig Land & Watersh	\$ 27.7
Ecuador	P007105	Irrig Ta	\$ 20.0
Mexico	P007701	On-Farm & Minor Irri	\$ 170.0
Peru	P008037	Irrig. Rehab	\$ 85.0
Uruguay	P008173	Irrg Nat Res Mgmt	\$ 41.0
Livestock			\$ 44.0
Brazil	P055388	Animal&Plant Dis. Co	\$ 44.0
Research			\$ 141.6
Brazil	P043873	Ag Tech Dev.	\$ 60.0
Colombia	P006880	Agriculture Technolo	\$ 51.0
Ecuador	P007131	Ag Research	\$ 21.0
Peru	P047690	Res. & Extension	\$ 9.6
Forestry			\$ 25.0
Argentina	P006040	Forestry/Dv	\$ 16.0
Nicaragua	P052080	Forestry	\$ 9.0
Other Agriculture			\$ 905.6
Brazil	P043871	(Piaui)R.Poverty	\$ 30.0
Brazil	P037828	Br (Pr)R.Poverty	\$ 175.0
Brazil	P051701	Maranhao R.Poverty	\$ 80.0
Brazil	P042565	Paraiba R.Poverty	\$ 60.0
Brazil	P042566	R.Poverty(Pe)	\$ 39.0
Brazil	P038896	R.Poverty(Rgn)	\$ 24.0
Brazil	P043868	Rgs Land Mgt/Poverty	\$ 100.0
Brazil	P035717	Rural Pov. (Bahia)	\$ 105.0
Brazil	P038884	Rural Pov.- Ceara	\$ 70.0
Brazil	P038885	Rural Pov.-Sergipe	\$ 36.0
Guatemala	P054462	Land Fund	\$ 23.0
Honduras	P055991	Access To Land Pilot Project	\$ 8.0
Mexico	P007711	Rural Dev. Marg.Area	\$ 47.0
Mexico	P057530	Rural Dev.Marg.Arii	\$ 55.0
Nicaragua	P064915	Ag Techn & Rural Edu	\$ 23.6
Nicaragua	P007790	Rural Municipalities	\$ 30.0
Other Finance			\$ 50.0
Brazil	P050776	Ne Microfinance Development	\$ 50.0
Rural Roads			\$ 84.0

Table A3.5 Projects under supervision in LCSER
in US\$ million

<i>Country, by Sector</i>	<i>Project ID</i>	<i>Project Name</i>	<i>Net Commitment</i>
Ecuador	P007115	Rural Dev	\$ 84.0
Natural Resource Management			\$ 286.5
Brazil	P006474	Br Land Mgt 3 (Sao Paulo)	\$ 55.0
Colombia	P057326	Sierra Nevada Sustainable Development	\$ 5.0
Colombia	P006868	Natural Resource Man	\$ 39.0
El Salvador	P007174	Land Administration	\$ 50.0
Guatemala	P049616	Land Administration	\$ 31.0
Honduras	P007398	Rural Land Mgmt	\$ 34.0
Panama	P007847	Rural Pov & Nat Res	\$ 22.5
Paraguay	P007918	Ntl Res Mgmt I	\$ 50.0
Other Environment			\$ 202.1
Brazil	P050772	Land-Based Poverty Alleviation I	\$ 202.1
Mexico	P060718	Alternative Energy	\$ -
Total commitment for LCSER projects under supervision			\$2,951.9

Source: Business Warehouse, Supervision projects detail, December 12, 2000

Table A3.6 LCSER pipeline projects, fiscal years 2001-2003
commitment in US\$ million

<i>Fiscal year</i>	<i>Country</i>	<i>Project ID</i>	<i>Project name</i>	<i>Sector</i>	<i>Sector Descrip.</i>	<i>IBRD Commit Amt</i>	<i>IDA Commit Amt</i>	<i>IBRD/IDA Commit Amt</i>
2001	Argentina	P057459	Sustainable Fisheries Mgt.	AF	Fisheries & Aquacult	5		5
2001	Honduras	P055991	Access to land	AY	Other Agriculture		8	8
2001	Chile	P057479	Water Resources Mgt.	VM	Natural Res Mgmt	25		25
2001	Brazil	P050772	Land-Based Poverty alleviat.	AY	Other Agriculture	202.1		202.1
2001	Brazil	P050875	CE 2 nd Rur.Poverty	AY	Other Agriculture	30		30
2001	Brazil	P050880	PE 2 nd Rur Poverty	AY	Other Agriculture	37		37
2001	Brazil	P057649	BA 2 nd Rur. Poverty	AY	Other Agriculture	54		54
Sub-total 2001						353.1	8	361.1
2002	Nicaragua	P072632	Forestry II	AT	Forestry			
2002	Mexico	P070520	Rural Devel. Marginal Areas III	AY	Other Agriculture	75		75
2002	Guatemala	P064883	Western Altiplano Natur. Res. Mgt	VM	Natural Res Mgmt	30.4		30.4
2002	Nicaragua	P056018	Land Administration	VM	Natural Res Mgmt		30	30
2002	El Salvador	P035746	Rural Develop.	VM	Natural Res Mgmt	50		50

Table A3.6 LCSER pipeline projects, fiscal years 2001-2003
commitment in US\$ million

<i>Fiscal year</i>	<i>Country</i>	<i>Project ID</i>	<i>Project name</i>	<i>Sector</i>	<i>Sector Descrip.</i>	<i>IBRD Commit Amt</i>	<i>IDA Commit Amt</i>	<i>IBRD/IDA Commit Amt</i>
2002	Mexico	P060686	Municipal Develop. in Rural areas	VY	Other Environment	400		400
2002	Panama	P050595	Land Administration	VM	Natural Res Mgmt	47.9		47.9
2002	Panama	P035754	Rur. Poverty	VV	Environment Adj.	40		40
2002	Mexico	P070108	Rural Microfinance Capacity Building	FS	Financial Sect. Dev.	40		40
2002	Bolivia	P055233	PARTIC. RURAL INV II	IL	Small Scale Enterp.		30	30
2002	Ecuador	P039437	Rur Poverty	SY	Other Social Protect	37.9		37.9
2002	Brazil	P050881	Rur Poverty	AY	Other Agriculture	50		50
2002	Uruguay	P070653	Rur. Develop.	XX	UNIDENTIFIED	30		30
Sub-total 2002						801.2	60	861.2
2003	Mexico	P035752	IRRIGATION & MODERN.	AI	Irrigation & Drainag	280		280
2003	Paraguay	P007919	SUST.RURAL INV. PROJ	AA	Agriculture Adj.	20		20
2003	Brazil	P050777	LAND-BASED POVERTY 2	AY	Other Agriculture	225		225
2003	Ecuador	P037051	WATER RES. MGMT.	VM	Natural Res Mgmt	25		25
2003	Nicaragua	P055823	RURAL MUNICIPAL. II	BD	Decentralization		46	46
2003	Argentina	P070628	AR-Rural Poor	XX	UNIDENTIFIED	75		75
2003	Brazil	P057650	BR PROAGUA 2	WY	Other Water, Sani.	200		200
Sub-total 2003						825	46	871
Total LCSER commitment for current and pipeline						1979.3	114	2093.3

Appendix 4 Rural Development in Action – Best Practices and Concrete Examples

On the “How” of the Action Plan

This section presents some examples and experiences of how to translate strategic priorities into actions. It lists a number of projects and experiences in the Latin American and Caribbean Region (LCR) portfolios in agriculture (LCSER), natural resources (LCSER), social development (LCSEO), human development (LCSHD) and infrastructure (LCSFP). It does not pretend to be comprehensive but just to indicate the basic feature of some of the relevant operations that could be used as reference for scaling up, adjusting, expanding or replicating future projects. They are presented according to the six Lines of Action of the Action Plan

1. Raise productivity as the engine of agricultural growth

Public/private alliances for more effective delivery of technology generation and transfer. Cases from Colombia, Venezuela and Ecuador.

An important design principle in the LCSER portfolio is the competitive grant system for improving public-private partnerships in technology generation and transfer and better assist smallholders.

Smallholder/private business alliances in the production-marketing chain. This is an example of a successful smallholder cum private business alliances in a conducive incentive and institutional environment generated by Guatemalan government. The case was developed by the FAO Farming Systems Study, Appendix 5 (December 2000).

Overview. The following case study documents an example of substantial and sustained growth in farm family incomes that has occurred within a part of the Mesoamerican hillside maize-beans system as a result of diversification of small-scale producers into export horticulture. The case is particularly interesting because the beneficiary population is largely indigenous, many not even speaking Spanish, and because their domination of the U.S. market for snow peas has been achieved entirely on the basis of micro-level production by over 20,000 family production units.

Key actors. This impressive position has been reached without any external coordination or support from Government or development agencies. Rather it was made possible by the activities of the private sector who were, in turn, responding to newly emerging international market opportunities. However, the effectiveness of the private sector actions, and hence the success of the small-scale producers, was greatly enhanced by the concurrent emergence of the Guatemala Non-Traditional Exporters' Association (GEXPRONT), and the existence of a series of national governments generally supportive of the needs of an emerging export sector. Thus major gains for poor, indigenous farming families resulted, in part at least, from an effective environment for business development.

Box A4.1 Public/private partnerships in research and extension projects

Since the mid 1990s the Bank and its partners have undertaken a wide range of institutional reforms in the region in the area of agricultural research and agricultural extension. Such reforms are being carried out in the Venezuela Agricultural Extension Project, Colombia Agricultural Technology Development Project and the Ecuador Agricultural Research Project and the Brazil Agricultural Technology Development. This work is now being further expanded in Peru and Nicaragua.

The underlying principles of these projects are (a) diversification in execution and funding; (b) allocation of funding on a competitive basis; (c) demand driven funding; (d) empowerment of local communities; and (e) increased private sector implementation.

In the case of *Colombia*, research and technology transfer projects in smallholder agriculture are generated on a demand driven basis by locally run networks and are then subjected to regional peer reviews panels which approve about 17 percent of all projects submitted. The result has been that the quality of projects has increased considerably and that the system is much more competitive as a result. Of the total financing about 46 percent has come from cofinanciers other than the state, thereby diversifying funding and relieving the strain on government budget resources and increasing the sustainability of the model. The number of providers of services has also increased i.e. universities, NGOs, farmers groups etc thereby taking advantage of idle capacity in the system.

In the case of *Venezuela* a municipal extension service for small farmers has been installed where financing is shared with Central government, state governments, municipalities and farmers. A private company or NGO is contracted to implement the extension services at the municipal level. An association (ACE) comprised of farmers and municipal authorities oversee the service at the local level. The project is now working in 115 municipalities and is receiving support from all levels of government and society. Local priorities are dealt with on a demand basis and in this way the most excluded parts of society are dealt with adequately. The participation of women is now at 30 percent of total.

In *Ecuador* a competitive fund is used to assign resources for research on a set of national priorities. The results have been very exciting in that many institutions are participating in the implementation and financing of research. It is estimated that the project funds are leveraging a further 40 percent of funding from the implementing agencies thereby activating unused capacity in the system. A competitive strategic alliance program is also being financed which allows Ecuadoran institutions establish alliances with international partners in research and education, thereby ensuring access to the latest knowledge for the sector.

This work needs to be further strengthened in the future to ensure the sustainability of these reforms and to modernize the delivery of information to the rural communities. So assisted, they can survive and better still, thrive in a globalized economy and continue to contribute to the growth of the overall economy.

Box A4.2 The case of small-scale indigenous farmers of Guatemala: integration in the snow peas, broccoli export business

There is no doubt of the enormous impact that the development of snow peas and broccoli exports has had on small-scale indigenous farmers of the Guatemalan altiplano. From 1980 to 1993, the Guatemalan share of the OECD market for fresh, frozen and processed vegetables quintupled, from 0.09 percent to 0.45 percent,⁴² even while the commercial-scale production of these products was declining to nothing. By 1995, Guatemalan supplied one third of U.S. imports of snow peas; for a value of US\$55 million per annum. By 1996, it was estimated that 21,500 indigenous families were involved in direct production of these two crops, generating estimated gross farm incomes in excess of US\$30 millions. This equates to US\$1,500 per family.

A further US\$ 28 million was calculated to accrue annually to the wholesaling, processing, packing and export sector within Guatemala, some of which would have benefited rural inhabitants engaged in collection, packing and transport activities. In fact, a study undertaken in 1994 estimated an indirect labor multiplier of 0.26 in relation to non-traditional agricultural activities in Guatemala,⁴³ suggesting that as many as 27,000 families may have derived employment from these activities, without counting those occupied in producing mini-vegetables, raspberries and other later arrivals. With a conservative family size estimate of 6 persons, these two non-traditional crops may have contributed to poverty reduction for over 160,000 rural poor in Guatemala. Further more, these numbers do not take into account providers of good and services in rural areas, who were able to establish business in response to rising rural demand.

Key Contributing Factors

While it would be unfair to downplay the initiative and drive of the indigenous producers and small-scale enterprises that drove the snow pea/broccoli system to its success in Guatemala, it is argued that the impact was in fact a result of the interaction of a number of factors. Within the production and marketing system itself, the low costs of entry into either production or export of snow peas resulted in a system that was broadly competitive. There were no apparent advantages of scale such as were seen in broccoli freezing (perhaps contributing to the much lower returns for this crop). As a result, as much as 47 percent of the final market price was captured by the growers, a high proportion for a perishable export crop. Part of the credit for this achievement must go to the Four Pines Cooperative, which was an early pioneer in promoting snow peas, broccoli and mini-vegetables.

As important was the role played by AGEXPRONT in creating (and in relation to Government, promoting) a framework within which such competitive behaviour could flourish. Marketing support such as the annual Agritrade Fair and the "recruitment" of overseas Foreign Ministry commercial attachés as trouble shooters in destination markets, provided new entrants to the export business with market facilities that would otherwise have been very costly to develop. Similarly, the development of the Ventanilla Unica, and the management of freight handling at the Guatemala International Airport reduced transaction costs for new entrants⁴⁴.

Unusually for an exporters' trade association, however, AGEXPRONT took a leading role in promoting enterprise-producer linkages, seeing it as a key to increasing product availability, and hence turnover, for its member businesses. From an early point, AGEXPRONT encouraged exporters in the same product line (melons, mangoes, snowpeas, broccoli, cut flowers, etc.), to work together in sub-commissions directed at identifying and alleviating common obstacles to the continued development of that product. It was this strategy that directly led to the establishment of the USAID financed shared-cost field research programs, and subsequently the privately funded extension services, as exporters agreed on a common need to deal with low yields, chemical contamination issues or other problems. In 1997 AGEXPRONT created its newest sub-commission; for exporters of environmentally friendly products and services.

The relationship between the private sector and the Government of Guatemala has also been crucial for the rapid development of the non-traditional export sector, and hence ultimately for income generation among small-scale producers. The general thrust of Government activity has been supportive of small-scale enterprises. In the longer term, the willingness of MAGA to utilise AGEXPRONT as an executive arm for channeling and managing public sector funds has shown that international funding is not the only way for such private sector bodies to access the financing they need to continue their activities.

Brief retrospective. Over a period of approximately 16 years, from 1974-1990, a number of key changes occurred in Guatemala that combined to profoundly affect the lives of over 150,000 poor inhabitants of the Guatemalan rural highlands. In broad terms these changes can be grouped into three categories:

- The emergence of small-scale producers and small to medium-scale enterprises as key players in the creation of a major export trade for snow peas and broccoli;
- The formation of the trade association GEXPRONT, and its role in facilitating the growth of the non-traditional agricultural export sector; and
- The recognition by the Government of Guatemala of the importance of exports in driving economic growth, and its adoption of export-friendly policies.

Integrated water resource management for a competitive agriculture--The case of Mexico

Through the Irrigation and Drainage Sector program (1991-2000), the Bank approached the government's full irrigation, drainage and flood control program within a time-slice operation (box A4.3). This provided much broader scope for a dialogue and agreement on irrigation policy issues including investment selection criteria, environmental safeguards, procurement and auditing, rules and M&E procedures. This sector loan was conceived as the first phase of a broader irrigation and investment program for the sustainable development of water and soil productivity in the Irrigation Districts (IDs). The sector project supported the transition from an engineering-driven, centrally-managed irrigation investment program relying mainly on Government grants, to a more decentralized system based on transparent investment selection criteria and greater participation of beneficiaries and users in decision making and cost recovery. The strategy was also in line with the Bank's policy, stressing the need for decentralization as an important element of an integrated approach to water resource management and private sector development. The institutional reform process for improved irrigation management and cost recovery was instrumental to ensure that the legal requirements for cost recovery were implemented. The sectoral time-slice approach based on the early definition of clear investment selection criteria and methodology and strong institutional building and strengthening, has also proved to be adequate.

Implementation experience and results. Project outcome is considered highly satisfactory. Mexico has undertaken a radical program of decentralization and private sector promotion in irrigation involving substantial policy changes, restructuring of agencies, and transfer of management responsibilities to autonomous Water Users Organizations (WUOs). Going beyond the original targets of transferring the 21 best prepared IDs foreseen at appraisal (1.97 million ha), the project transferred operations and maintenance (O&M) functions for 72 IDs (3.28 million ha) to 431 WUOs, and an additional 8 IDs are in the process of being transferred. Funding for O&M is ensured through water fees paid by users, who increased their share in O&M costs from 20 percent to an average of 90 percent, almost reaching self-sufficiency and significantly improving water use efficiency. To supplement this project, the government, with Bank financing, launched in 1994 an On-Farm and Minor Irrigation Networks Project (OFMINP) to enhance farm-level productivity and water conservation, as well as a program to register and assign water rights to users. The combination of the two programs may become a model for many development countries that embark on the revision of their irrigation sector and are sending officials to Mexico to learn from this experience.

Higher water use efficiency and production growth. Before the project, irrigated agricultural production declined at an average rate of 0.4 percent per annum (1982-1989), while since the transfer program was in operation the trend was reversed and production grew at a rate of 4.8 percent per annum (1992-1998). The reduced risk associated with availability of water for irrigation no longer depending on central government budgets and timely transfers, strongly stimulated a modernization process through production investments and technology improvements. Higher efficiency resulted from improvement and installation of better structures, and the adoption of innovative technologies. Investments are now increasingly decided and selected by the WUOs following transparent criteria, procured competitively and implemented efficiently. It is estimated that O&M costs are about 30 to 40 percent lower under the new WUOs' responsibility and better management.

Government role. The inability of governments to provide the required funding for the irrigation sector from the public budget, results in a situation where public infrastructure cannot be maintained and is unsustainable over time. Strong political will is required to charge the full O&M cost to users of irrigation facilities, while devising acceptable transfer mechanisms. It is important to mitigate the traditional bias that government irrigation agencies have in favor of infrastructure development as they tend to overlook or ignore broader sector policies and resources allocation issues such as economic and agronomic aspects that affect the overall performance.

Box A4.3 Irrigation and drainage sector project, Mexico

The project included drainage as a component of a sector work which had the broad objective of providing adequate level of investment in irrigation on the basis of rigorous and technical criteria; gradual decentralization of funding and management of O&M and transfer the management to WUA. The great challenges that the project went through include among others:

- promoting government commitment
- promoting awareness and interest among farmers
- developing legal and regulatory framework
- empowering the user groups
- building capacity within the farming community to manage and administer water districts
- HR development within the professional staff to match the new institutional and technological changes.

On the drainage side the biggest challenges was to build capacity for:

- assessment and diagnosis of the drainage problems
- introducing appropriate technologies for construction of subsurface drainage and channel maintenance.
- developing capacity to design and build subsurface drainage systems.

By the end of the project, 60,000 hectares were provided with subsurface drainage (potential needs is estimated to be 550,000 ha) through this and under other projects influenced by the Bank project, important achievements were as following:

A capacity was developed among the private sector to design and install subsurface drainage systems using machinery and materials with world standards.

Typical costs for agricultural piped drainage are more affordable (about US\$ 700/ha)

Remote sensing was developed and used to map salinity on a regional scale.

Pilot areas were implemented to test technology, carry out research and disseminate information.

Research was carried out to use biological control of aquatic weeds in open drain channels.

Training was provided at all levels including farmers (65 HL professionals were trained).

A financial mechanism was developed to encourage farmers to invest in drainage at the farm level (50% of the cost was provided by the government as matching grants).

Currently three companies have PE drainage pipe on regular production lines.

Full recovery of O&M costs.

Monitoring system is installed to observe water table levels & regional movement of ground

2. Pursue a systematic approach to improve the competitive functioning of market

While a number of successful examples exist on land administration (most of Central America), there are only few but successful cases of rural finance operations. There are almost no cases addressing the issues of product marketing, farmers' organizations, and private sector promotion. However, the recent Colombia Productive Partnership project, promoting contract farming with the private sector and integration in the supply chain promises to provide valuable lessons in that respect.

Land Administration, the Case of El Salvador

Following the civil war in El Salvador, a critical issue for rebuilding the country and consolidating peace has been security of land tenure. The project is a direct result of the peace process. Its key objectives are first to register all properties in El Salvador, urban and rural, private and public; and second, to strengthen the land registry and national cadastre, to keep the information updated and the maintenance self-financing.

Main accomplishments to date. The project has had major accomplishments both in terms of process and product. These include:

- *Broad participation.* Active participation by civil society to ensure quality of regularization work.

- *Partnerships.* Use of the private sector and NGOs for land regularization instead of force account for field work (unlike the Thailand projects).
- *Ease and efficiency of registration.* Establishment of a unified land registry and cadastre system under a single institutional authority (CNR). Land registration average turn-around time reduced from 6 months to 48 hours.
- *Greater access.* Internet access to land records provides easy access to records.
- *Stronger institution.* Institutional and technical strengthening of CNR that has now embarked on an ISO 9000 certification process.
- *Extensive regularization.* Regularization of Sonsonate Department (14 municipalities, about 115,000 properties), ongoing regularization of Ahuachapan and Santa Ana departments (about 200,000 properties).

Why is this project important? The importance of the project rests on the following factors:

- *Security.* It provides security of land tenure, especially to the most vulnerable groups who had no practical access to land registration in the past (including women).
- *Economic.* It reduces transactions costs in the land markets and allows leveraging of land assets as collateral, also deepening the access by the poor of the financial sector.
- *Institutional.* It has developed one of the most advanced and efficient institutional framework in the world. The CNR integrates the Property Registry, the National Cadastre, and the Geographical Institute under the same umbrella. This allows the sustainable, efficient and secured management and maintenance of a parcel-based registry.
- *Knowledge sharing.* It is the learning laboratory for the region. The Salvadorans have been very generous in letting other Central American countries (Honduras, Panama, Guatemala, Nicaragua, Costa Rica) visit the project team and sites, and are discussing with them arrangements for technical assistance for systems development.

El Salvador now enjoys international prominence as a leader in this area. This has already been recognized by Bentley, a US-based software company, that nominated the project for two of their Proactive Engineering Success Awards: Best Deployment of EEM Technology and Best Enterprise-wide Collaboration for innovation and application development in integrated systems.

Market-Assisted Land Reform in Brazil

In this approach, beneficiaries negotiate the purchase of farms directly with the owners, within the context of the Rural Poverty Alleviation Project in the state of *Ceara*. This approach proved promising, and the Government asked the Bank to develop a free-standing Land Reform Program. The pilot project is called *Projeto Cédula da Terra*

Results from the various evaluation studies conducted, as well as Bank supervision, reveal that the *Cédula da Terra* project is achieving its objective of expediting land access to the rural poor. As detailed below, land quality is adequate, land prices are lower than under more traditional approaches, self-selection is quite satisfactory and newly acquired farms show favorable expectations for financial and economic viability. Equally important, conservative estimates indicate that beneficiaries should be able to generate sufficient earnings to service their debt obligations and significantly raise both incomes and living standards.

Projeto Cédula da Terra combines a community-based approach to land acquisition with a matching grant mechanism to finance complementary on-land investments to increase land productivity and small-holder incomes. With the stated objective of resettling 15,000 families in three years, *Projeto Cédula da Terra* is about to be completed. It has benefited some 23,000 families with about 617,000 hectares at a per hectare cost of about R\$193 and per family cost of about R\$4,759, both significantly below the costs of the Government's traditional approach

The main reasons given for its success are:

- *Community-based approach.* The community-based approach has proven cost-effective and non-conflictive. Community associations take the initiative by selecting and negotiating the land purchase and deciding priorities for productive investments. Funds are being directly channeled to the respective community associations. The pilot experience shows that reliance on community initiative leads to higher sustainability through self-selection of beneficiaries and effective selection of lands to be purchased.

- *Decentralization.* Effective decentralized implementation of rural development projects in the Northeast under the Rural Poverty Alleviation Projects (RPAP) and the Land Reform and Poverty Alleviation Pilot project has been successful. This success establishes a model institutional framework for a decentralized, community-based approach to land reform, administered jointly by State agencies and the financial institutions.
- *Access to Investments.* Rather than suffering from delays in public provision of support services, community associations have immediate access to financing for joint investments to make their newly acquired lands productive. A lump-sum amount, based on a per family ceiling and incorporating the price of acquired lands, is available for infrastructure and productive investment subprojects.
- *Piloting and thorough evaluation.* While important lessons have been learnt from the pilot, thorough evaluation will continue and adjustments will be made as problems are detected.

Supporting the Development of Rural Micro-Finance Services (Argentina and Mexico)

As general financial sector reform has not been sufficient to achieve the objectives of increasing access to sustainable financial services in rural areas, the Bank has been working increasingly in LCR to address those constraints which are of particular importance for provision of rural financial services. These constraints are associated with transaction costs and covariance risks.

Micro-finance has proven to be an effective mechanism to reduce transaction costs associated with providing financial services to small businesses and low-income individuals. Application of micro-finance “technology” can substantially reduce the transactions costs incurred by suppliers and consumers of rural financial services. Several programs have been able to reach large numbers of clients with small-value lending and savings services while maintaining high quality portfolios, and even achieving profitability. They have undertaken careful training of loan officers in the evaluation and servicing of clients; shared information gathering costs with clients through utilization of solidarity groups, and acknowledged that the most important repayment incentive is continued and rapid access to credit. In Mexico the development of a “savings kit” for the establishment of community savings and loan funds has boosted diffusion of a methodology that proved to meet the expectations and the needs of poor rural communities and groups through a wealth generation approach.

Developing “social intermediation” in rural communities. While introduction of micro-finance services focuses on strengthening the supplier’s ability to take measures to reduce transactions costs, assistance to communities in organizing themselves to manage village funds can reduce the costs to the consumers of financial services by providing an interface between financial institutions and individual communities. The best-known application of this approach is in the village banking programs supported by FINCA, Freedom from Hunger and CARE.

Support of pilot programs to develop risk management instruments: Improved rural finance requires the development of cost-effective instruments which allow producers, intermediaries and others subject to mitigate their exposure to covariance risk. The covariance risk associated with lending to farms and agriculturally related industries is perceived as a significant impediment by financial institutions to expanding lending services to rural areas. In the absence of formal insurance mechanisms, borrowing from public banks is used by rural entrepreneurs as a *de facto* insurance mechanism. Public banks will generally provide rescheduling of debt or even debt forgiveness in cases of severe crop losses due to weather, with the government treasury covering the resulting bank losses. Potential borrowers are therefore likely to utilize a public bank irrespective of its lower quality service. Insurance products permit separation of the insurance function from the lending function, providing private lenders with the opportunity to compete on a level playing field with public banks.

Development of rural information systems. Information in credit histories can be complemented by aggregated production information to assist lenders in calculating the risk of potential loans. Standard credit information systems are limited to individual client repayment history and, in some cases, salary histories, and are used to develop credit-scoring models that predict the probability that a potential borrower will default on their repayments. Potential lenders can complement this information with aggregated production and price data to predict the expected cash flow of non-salaried, rural producers.

3. Foster a rural space” approach in regional development

We present several successful cases of community-driven development projects. Some combine both community approaches, municipal strengthening and regional (territorial) development.

Community-Driven Projects in Northeast Brazil—the Rural Poverty Alleviation Program (RPAP)

This program grew out of the Northeast Rural Development program (1985) when the latter was reformulated in 1993, following the lines of a small pilot project component. This program is reducing poverty not just by delivering services, but by changing the way services are prioritized, targeted, and delivered. The investment is used as a catalyst for community participation. Community associations identify and prioritize their most basic needs, their choices limited only by a short negative list of subprojects that do not conform to World Bank rules. These projects deliver high-quality, rural infrastructure to the poor at 40 percent lower cost than investments of similar quality delivered by public agencies. The communities prepare, implement, operate and maintain the subprojects, creating a sense of ownership and fostering sustainability. The outcomes of these projects have led the Northeast State Governors, a diverse group of personalities representing a diversity of political parties, to come out in unequivocal support of the program's approach and its continuance.

Key Design Principles. This approach worked because there was a political commitment to decentralization. In Brazil, under the 1988 Constitution, most of the responsibility and resources for implementing development programs were decentralized from the Federal Government to the States, municipalities, and local communities. Within this enabling political and institutional environment, the projects combined the following principles:

- **Political support** by key political figures was vital in the early planning stages and allowed the then highly innovative decentralized approach to be piloted. Fiscal and investment-decision making was decentralized. The *pilot approach* subsequently permitted experimentation, and also was essential for developing, through demonstrated track record, broad-based political support for scaling it up.
- **The state must provide budget to support the State Technical Unit.** This increases the political ownership of the process, and ensures long-term sustainability of this central over-sight institution. The STU is also located in an agency of state government with technical capacity and which tends to be unbiased, e.g., planning department.
- **Community manages resources:** a hundred percent of funds for an approved subproject are disbursed directly to the communities. This ensures community groups are intrinsically involved, and are responsible for every stage of the project.
- **All members of an association can vote.** In addition, all adults of a community have the right to participate in an association. While no gender quotas were enforced, a significant portion of association membership and leadership is female.
- **A few simple 'rules of the game'** were widely disseminated, then consistently and transparently enforced. Poverty targeting was simple, and explicit, and easily monitorable. By using objective criteria, the rules foster transparency, and minimize political interference. More specific program rules can vary across states and are subject to negotiation. These rules are incorporated in a detailed Operational Manual that is readily available to the project MCs and the communities.
- **Enhanced participation in financing by beneficiaries.** This fosters a willingness to share responsibility for the operation, maintenance of project investments.
- **'Bypass' mechanisms were designed into the projects so that dissatisfied communities could appeal to higher levels (but not without penalty if claims not justified)**
- **Flexibility in program design allowed the institutional arrangements to evolve and adapt to local needs/demands.** It also allows different arrangements to co-exist in neighboring municipalities according to capacity/needs. For example, the progression from PAC to FUMAC occurred in response to demand from community associations. These know FUMAC councils are an available mechanism for decision making, and have an annual budget ceiling. FUMAC functioning is facilitated by the Mayors who recognize the success of the program, and want to be more involved as they perceive the mechanism is beneficial to their Municipality.
- **Institutional sustainability is achieved by involving local authorities, with different ways of doing things, through the 80/20 percent division of Municipal Council membership.** More than 30 percent of municipalities are using the project-sponsored approach in their day-to-day functioning in the allocation of other funds.
- **Minimal bureaucracy is a key program feature, reducing administrative costs, keeping overheads low (typically seven percent—5 percent technical assistance, 2 percent operating expenses--which includes STU project supervision expenses, but not salaries, which are paid by the state).**

Basic Rural Services: Bolivia: Rural Water Supply and Sanitation

The project's goal is to help reduce poverty in rural areas by enhancing productivity through improved health conditions, and through a more efficient use of the time saved collecting water. Specifically, it included three main objectives. First, it sought to increase the coverage and sustainable use of water and sanitation services. Second, it aimed at assisting the water and sanitation units at the Departmental level (UNASBAs) to provide technical assistance to municipal governments and local communities. And, third, it wanted to strengthen the capacity of the sector unit at central government level (DIGESBA). To achieve these objectives, it consisted of a rural water and sanitation infrastructure component, and an institutional capacity building program. Under the first component, about 600 water systems (about 370,000 beneficiaries) will be constructed by the closing date, December 2000.

Why it has been considered best practice. From the beginning, the project adopted design elements that have been identified as best practice from international experience and which were tested under a pilot project executed by the World Bank-UNDP Water Program (1991-1993). These elements are:

- *Adequate institutional sector framework.* The sector organization consists of a small unit (DIGESBA) at the central level (within the Ministry of Housing and Basic Services) which is responsible for policy formulation, sector planning and resource mobilization. At the departmental level, the DIGESBA is represented by a small unit (UNASBA) whose role is promote the central Government policies and provide financing for designing projects. The Municipalities are responsible for the provision of water and receive substantial amounts of central funds to use in investment projects. Communities contribute labor and in some cases cash (where the communities have not been able to mobilize the cash, the municipalities have in effect stepped in to provide the funds. However these communities have a debt to repay in terms of labor in some other municipal project).
- *Joint financing by project, municipality and local community.* The financial policy of the project includes a subsidy ceiling of \$70 per capita, leaving for the community and the municipality to finance the cost of any service level whose cost is above the ceiling.
- *Decentralization to the municipalities.* Under the project, water supply projects were identified and discussed as part of the municipal operating plans.
- *Substantial municipal involvement.* Municipalities contributed up to 25 percent of the investment costs. Municipalities are also responsible for the long-term technical assistance to the communities.
- *Community responsibility for O & M.* The communities, through their water committees and operators, are responsible for the day to day operations of the systems.
- *Educational support to communities.* The communities and water committees receive technical assistance in operational aspects of the systems and hygiene education to maximize the benefits of the use of the new water systems.

Basic Operational Principles. The project design is based on three fundamental principles. These are:

- *Community participates.* Community participation is the primary design principle to increase likelihood of sustainability and economic efficiency.
- *Investments are of high priority to the community.* The project ensured that the proposed investments are a high priority for the community through reliance on five-year municipal development plans which are prepared by the municipalities in collaboration with the *Organizaciones territoriales de base* and the *Comites de Vigilancia*.
- *Communities and municipalities contribute financially to the maximum.* Least-cost and demand-driven investments are ensured by defining low per capita investment grants and by maximizing the financial contribution of municipalities and communities to the project.

The Mexico Rural Development in Marginal Areas project, APL I and II; and the Decentralization and Regional Development project.

- These two projects complements each other well in the context of an approach to regional development. The Rural Development project establishes new participatory mechanisms and institutions for addressing local priority needs at the regional level and promotes on-farm and off-farm income-generating activities, community development, and building social capital. The Decentralization and Regional Development project on the other hand invests in municipal development both from the point of view of basic infrastructure development and institutional strengthening.

The Rural Development in Marginal Areas Program seeks to improve the well-being and the income of smallholders in a number of targeted marginal areas, which are among the poorest of the country, through sustainable increases in productivity and better food security. The program seeks to improve the productive capacity of participating farmers through a community-based approach by: (a) facilitating the introduction of sustainable agricultural production systems, diversification through improved access to financial resources and agricultural services, and off-farm activities; (b) fostering community socio-economic development, organization, and participation; (c) enhancing the provision of effective technical support services and training to farmers and producers organizations; and (d) promoting an effective decentralized decision-making system fostering institutional coordination at the regional level. The development of regional councils is the most distinctive aspect of this program. The project would promote the participation of indigenous people, as they represent about 67 percent of this target population, and women, as they play a key role in both agriculture and in family nutrition.

At the regional and local level, the project developed implementation arrangements that strengthen ownership and accountability at the community level and stimulate beneficiaries and civil society participation and involvement. At the level of each of the regions covered by the project, a Regional Sustainable Development Council (CRDS) was established representing the members of communities and "ejidos", producer organizations, the State Government, and the relevant public institutions operating in the area. The CRDS have responsibility for the promotion, analysis, and selection of sub-projects submitted by producers groups and communities. The CRDS are assisted by a small technical unit to carry out the technical, economic, and social evaluation of the proposals, and make recommendations. The CRDSs also promoted inter-institutional coordination, foster synergy and complementarity of the programs already operating in the region.

Financing for productive investments operates under a matching grant scheme with an up-front contribution of the beneficiaries of not less than 30 percent of project costs. Moreover, for these activities, a cost recovery mechanism for the remaining 70 percent is being promoted at the community level to foster sustainability, generation of resources at the local level, and better accountability. Funds are recuperated by the beneficiary groups through their community organizations with the help of specialized assistance (NGOs, existing savings and loan schemes, consultants) which, in many instances, are already involved in the management of capitalization funds or informal micro-financing schemes. The incentive system for repayment into this revolving funds scheme builds on the concept of community/group responsibility and participation, including social peer pressure. Funds would keep revolving at the community level according to internal priorities and mechanisms as defined by the community/group.

The Decentralization and Regional Development project aims at improving the decentralized delivery of basic social infrastructure in rural municipalities, by supporting local small scale investments and institutional development activities, while strengthening capacities at the three levels of government to coordinate joint investments and municipal development programs. The Project proposes a comprehensive and coordinated approach aimed at building physical, social and organizational capital. Physical capital (infrastructure) is needed for improving the access of poor marginal communities to services they lack and to improve the leverage of poor municipalities to attract economic opportunities. Social capital is needed to guarantee a participative approach both in the identification of works to invest in in the implementation stages, while organizational capital in the *Ayuntamientos* is needed to consolidate a more efficient management of resources, especially the formation of human capital. This translates on a combination of: (i) investing on selected infrastructure works (water, paving, rural electrification, schools, nurseries); (ii) the creation of an incentives mechanism to foster the use of better managerial practices, and (iii) institutional development programs focusing on the "professionalization" of municipal government staff.

The development of rural municipalities through investment in social infrastructure and capacity building for improving management practices improved the quality of life in those municipalities as well as local governance. The project had a positive effect in reducing migration to the big cities or outside the country while rendering rural areas more attractive and developing the local economy. Municipal social infrastructure has become a key factor for attracting private enterprises and reducing the transaction cost of doing business in rural areas.

The project builds heavily on participation of community groups and NGOs as valid stakeholders, both during preparation and implementation of the works. It strengthens community practices in planning, executing, controlling the execution of sub-projects, delivering the corresponding services, and maintenance, thereby contributing to improving municipal accountability and sustainability. The project strategy rely on the use of an incentive

mechanism based on establishing and monitoring a model of good management including a monitoring process aimed at tracking compliance with agreed parameters.

Colombia – Magdalena Medio LIL – A Successful Experience in a Conflict Environment

This is a pioneering project for both the Bank and the Government of Colombia: promotion of a community-based, participatory approach to development and peace in one of the most conflictive regions of the country. The Government delegated the implementation to a Consortium composed of a well-respected NGO and the Catholic Diocese of Barracabermeja, the main city in the region. The counterpart funding is provided by the national petroleum company (ECOPETROL).

Accomplishments. The development objective of the LIL was to develop the operational capacity of the Consortium, citizen's network (informal network of community members and organizations) and other partners to work together towards collectively defined objectives to reduce poverty and increase peaceful coexistence in the Magdalena Medio region. The project's two components were: capacity building for program management, and development & implementation of sub-projects (ranging from investments in education and health, to productive projects in rural areas).

The LIL has achieved its development objectives. The participatory, community oriented methodology for promoting development in the midst of conflict has proven effective at creating a longer term vision of a better future for the region, strengthening the region's human and social capital, mobilizing resources and attention for the previously neglected region, and starting a community-led process of improving basic services and investment which can be scaled up as the program progresses. The two project components have yielded tangible results which are being documented in the ICR under preparation. The capacity of the Consortium has been substantially increased, as evidenced by its ability to operate in the increasingly complex situation in the region, and to mobilize and effectively use 14 million pesos during the two years of the LIL (of which loan and counterpart funds accounted for 68%). The most striking achievement is the increase in human and social capital: the citizens network now includes 172 organizations involving 8,640 persons who have internalized the vision and goals of the program. In the sub-project component, 67 project initiatives have been supported with a strong emphasis on building the capacity of the organizations promoting them.

Lessons. The participatory, operational model for promoting development piloted under the LIL functioned well in the complex, conflictive environment of the region. The model is characterized by the following basic elements:

- It is sustained by a change agent (the Consortium) which enjoys high credibility among all the stakeholders.
- It is based on community and individual participation in the making of decisions about the community's development, and establishes specific mechanisms for this participation (e.g. the 'nucleos' of the citizen's network and the project initiatives).
- It is based on a methodology that takes into account the capacity and 'initial state' of the citizens, and from this base initiates the learning and capacity building of community organizations so that they are able to take charge of their own development. Further, it recognizes and supports existing organizations and previous experiences in these communities.
- The change agent (Consortium) operates in a decentralized manner.
- The change agent's staff (Consortium) acts consistently in accord with defined values of respect, transparency, autonomy, and defense of the public interest.

One of the lessons in applying this approach was that increasing the capacity of individuals and communities to take charge of their own development, particularly in a conflictive climate, takes more time than originally expected particularly to develop their ability to prepare and implement specific investment projects which translate into increased incomes and better standards of living. A key lesson of the project has been the need for flexibility and continuous learning when promoting a participatory approach in such a complex environment, and to expect substantial variation in the rate of implementation and development depending on the varied conditions in different parts of the region. Furthermore, the operational model which proved successful under the LIL is not a cookie-cutter approach that can simply be copied elsewhere. There are a number of critical ingredients in the way the project and larger program of which it is a part are carried out such as the commitment and dedication of the Consortium's staff which are not easy to reproduce.

4. Manage natural resources in a sustainable way

Central America: win-win program for sustainable resource management and eco-market niche development for small-holders

The Mesoamerican Biological Corridor (MBC). This is a unique and innovative project. In a region once divided by civil wars, eight nations have joined forces to create a place where environmental conservation, economic opportunity and rural development go hand in hand as the basis of sustainability. Known as the Mesoamerican Biological Corridor (MBC), this stretch of land encompasses nearly 30 percent of Central American territory. It links ecosystems, indigenous communities, and private lands in the longest continuous multinational sustainable development project in the world. The MBC is one of the most crucial areas for biodiversity protection on the planet – a biodiversity “hot spot.”

The Corridor was initiated through a 1997 agreement among the seven Central American heads of state. The member countries of the Central American Commission for Environment and Development (CCAD)–the environmental arm of the Central American Integration System (SICA)–along with Mexico, have worked with international organizations, multilateral banks, regional organizations, civil society, and bilateral donors to strengthen and support this unique approach to sustainable development. Integration of environmental and economic objectives is a fundamental underpinning of the MBC. Through the sustainable use of natural resources, the Corridor offers many opportunities to increase foreign investment, create jobs, generate economic revenues, and fight poverty.

The Corridor’s vast natural resources provide critical environmental services, including hydrological regulation, aquifer recharge, carbon sequestration, soil conservation, erosion control, biodiversity conservation, and reduced vulnerability to natural disasters. Today, Corridor countries are learning to place a monetary value on water basins, mangrove forests, and the role of conservation efforts in protecting coasts and other vulnerable areas against natural disasters. Based on this new recognition of the economic value of natural resources, businesses, communities, individuals, and governments throughout the region are beginning to focus on new approaches to growth that focus on sustainable development.

Increased global demand for eco-friendly products offers a unique opportunity for Corridor businesses and communities to establish themselves as leaders in new market niches. To this end, Corridor countries seek to leverage the demand for environmentally friendly products into increased export opportunities for shaded coffee, ornamental plants, organic produce, certified wood, and other products from Mesoamerica. These environmentally sustainable activities help strengthen the region’s economic position, while also preserving vital natural resources.

A number of projects aimed at integrating the region’s economic and environmental goals are already underway in the Corridor. The positive impact of these environmentally friendly economic activities is helping to spur other sustainable development projects in the region. Below are just a few examples of successful projects underway in the Corridor.

Banano Mejor: Environmental Certification Program. Initiated in 1991, this program establishes a comprehensive set of environmental and social guidelines for the banana industry, which is notorious for environmental degradation and poor working conditions. Banana farms involved with the *Banano Mejor* program, however, work to prevent deforestation and soil erosion, ensure worker safety, and use minimal pesticides. As a result of the program, river and beach pollution has decreased dramatically. *Banano Mejor* bananas are marketed with special labeling indicating their “eco-friendly” status, which can engender an economic premium or enable market entry. Some program participants have also developed new, environmentally friendly products, such as banana-based paper products, that help open new niche markets. The project was begun in Costa Rica and, through the integration efforts of the Corridor, has expanded into Panama, with plans underway for its adoption in Guatemala and Honduras.

ECO-O.K.: Coffee Certification Program. Shaded coffee farms are host to an abundance of biodiversity and provide a key habitat for a variety of songbirds. Sun plantations, on the other hand, destroy much of this important habitat. The ECO-O.K. coffee certification program was designed in response to concern about habitat loss in the region when many coffee farmers shifted from traditional shaded plantations to larger, more commercial sun plantations. The program, which began in Guatemala, certifies shade grown coffee with an “ECO-O.K.” seal of approval and helps producers conserve the natural habitat. The special certification also allows producers to charge a premium in specialty niche markets for environmentally friendly products. Through the Corridor, the program has

expanded into El Salvador. Programs like ECO-O.K. are showing coffee producers within the Corridor that they can protect biodiversity while still generating a substantial profit.

The devastation inflicted by Hurricane Mitch (1998) provides perhaps the most vivid example of the degree of human misery caused by natural disasters. Years of deforestation and poor land use in the region magnified the effects of this human and environmental tragedy. Conversely, in areas where environmental degradation was not as severe, the hurricane's effects were less destructive. The value of regional cooperation was made apparent in the wake of Mitch and helped accelerate cooperative efforts in the region. Through a range of disaster mitigation projects, the Corridor provides a vital lifeline for the people of Central America, a particularly important point in light of the region's climatic history. This is true for the poor, who are often at the mercy of devastating natural disasters. Extensive reforestation efforts help prevent the heavy erosion and mudslides that can prove deadly for Corridor communities, as Hurricane Mitch tragically demonstrated, and is having a tangible impact on preserving human life. Other Corridor projects, such as protecting mangroves, conserving coastal forests, preventing wild fires, and maintaining healthy marine ecosystems, help protect key resources that are essential to the livelihood of many people in the region.

Manage natural resources in a sustainable way: The land management projects in Brazil, in the States of Parana, Santa Catarina, Sao Paulo, and Rio Grande do Sul

The Government noted that the main focus of the Parana project was to address the serious environmental problems affecting the rural areas by reversing the process of soil and water degradation with the objective of establishing sustainable production systems. Project results from the Borrowers ex-ante, mid-term and ex-post evaluations indicate significant reduction in soil erosion in benefited micro-catchments due mainly to farmers' better understanding and adoption of project induced conservation practices. These measures provided substantial productivity gains and humanization of farmers' "field works." The projects reversed the States' declining agricultural productivity trends due to severe land degradation at a time when society was increasingly more sensitive to agricultural-induced environmental degradation.

Ex post evaluations, though complicated by drought, show dramatic results:

- Productivity of the main crops – maize, wheat and soyabeans – is estimated to exceed without project productivity by 20 to 35 percent.
- Soil loss was reduced by between 10 and 50 percent.
- Runoff water in streams contained less suspended solids, coliform bacteria and pesticide residues, thus lowering silting and water treatment costs in downstream areas, and reducing the incidence of water borne diseases and pesticide poisoning.
- Maintenance costs for rural roads were reduced by up to 80 percent; better all-weather access stimulated both commercial and social activities.
- Improved land management practices, capable collectively of increasing water retention on crop land, improving soil structure, raising fertility and reducing erosion, were adopted on some 400,000 ha in 534 assisted micro-catchments (103 percent of the appraisal target).
- About 106,000 farm families were reached with one form or another of project assistance – 131 percent of the appraisal target and equal to about 35 percent of all farmers in the State. Spontaneous adoption of improved practices occurred on a further 480,000 ha in non-project micro-catchments.

The projects successfully promoted innovative participatory approaches, to upgrade land management practices among farmers and rural communities. These have accelerated the introduction of improvements that reduce cash costs and labor requirements, give early increases in farm productivity, and improve the chances for farmers of staying in business and on their land in an increasingly unfavorable trading environment.

Two other states (Sao Paulo and Rio Grande do Sul) are already implementing micro-catchment development strategies under two state Bank-financed projects based on lessons learned from Parana (an earlier successful Land management project) and Santa Catarina projects. This strategy is also becoming a reference for the national water basin development strategy being prepared by the Federal Ministry of the Environment and for the State of Rio de Janeiro Micro-catchment Development Program now being prepared by the Secretary of Agriculture of Rio de Janeiro.

5. Build human and social capital

Community-managed schools in basic rural education

The *EDUCO* project in El Salvador pioneered the model of community-managed schools. This model has been adopted in several other countries, including Guatemala, and Honduras. The basic principle of the community managed schools model separates provision and financing of basic education. Financing remains the responsibility of the public sector, but provision of services is transferred directly to community associations. In practice this implies that a large part of the resources of these projects and government's education budget is transferred directly to community associations (comprising parents) to pay for all school inputs, including teachers. They are responsible for the hire/fire teachers, who under the model, are not public servants but private sector workers subject to the regulations of the Labor Code that regulate private sector workers (including their social security provisions).

Positive results on the ground. Results to-date in El Salvador, Guatemala, and Honduras are encouraging. These show considerable increase in social capital. Important indicators are: increased number of enrollments, an enormous ability of communities to organize associations to manage schools, the capacity of parent associations to manage resources and teachers, increased teachers' and children's attendance. The benefits to children are substantial. There was increased retention of children in school (and therefore higher educational attainment measured by years of schooling), mobilization of additional resources for children's education (for infrastructure improvements, school feeding, literacy programs, etc.).

6. Strengthen risk management and safety nets

Mexico PROGRESA (This program is not being financed by the Bank but it is considered a best practice example of a safety net program)⁴⁵.

Begun in 1997, PROGRESA provides integrated support for education, health, and nutrition to poor households living in poor rural areas. Conditional on good attendance, the program provides upper primary and lower secondary school stipends and subsidies for school supplies. It also provides free basic healthcare, health education, a cash transfer for nutrition, and nutritional supplements for pregnant and breast-feeding women and for children under age 5. The program reaches 2.6 million families. Evaluations suggest a 22 percent decrease in morbidity for children below age 2, a 21 percent increase in female enrollment in lower secondary schools, an 18 percent increase in attendance at health clinics, and an increase in schooling of one year among the target population.

The advantage of behavior-conditioned programs like PROGRESA is that they are tied to such benefits as school assistance and obtaining healthcare, and hence provide a two-pronged approach to risk reduction, providing income support for today's poor families while reducing the intergenerational transmission of income risk by raising human capital accumulation among the future workforce. A negative income tax, on the other hand, relies on a well-functioning and broad-based tax system, but can efficiently provide an automatic subsidy to families whose income falls below a certain target level, with benefits tapering off as income rises

PROGRESA is a good program with some areas for improvement as follows.

- *Supply-side.* By raising the demand for schooling and healthcare, PROGRESA is generating tensions on the supply side. To avoid these tensions, close coordination with the Education and Health sector ministries is needed. More generally, there remains an uncertainty as to the relative impact of demand and supply-side programs on improving education and health outcomes among the rural poor.
- *Transfers, targeting, and community participation.* PROGRESA's average income transfer is 253 pesos per month, which represents 22 percent of the beneficiaries' average total income. However, families with many children in school can receive up to 600 pesos per month, which may be an expensive way to achieve the program's objectives. The program's targeting is well done overall, but in villages where most of the population is poor, it may be better not to use means-testing to avoid tensions between beneficiaries and non-beneficiaries. In some areas, the individual-based logic of PROGRESA may not mesh well with traditional communal values.

Nicaragua Rainfall Risk Management Project, and Mexico Crop Insurance Study

Natural calamity risk management is a fairly new area of development assistance. The Nicaragua Rainfall Risk Management project (May 2000) is a good project example of such assistance. The Mexico Crop Insurance Study (April 2001) is a good example of analytical assistance to strengthen the system of crop insurance and to help low

income and poor small-holders manage risks better. Recent studies (e.g., the World Bank's *World Development Report on Poverty 2000/2001*) show that the poor are hurt both directly by natural catastrophes and indirectly through the long-term effects on inefficient investment and lower growth. Insurance against catastrophic natural shocks reduces stress on government budgets, makes possible timely relief to the poor, prevents depreciation of the public infrastructure, and promotes more efficient allocation of resources.

Nicaragua Rainfall Risk Management Project. This project would limit the country's vulnerability to the consequences of natural disasters. The Nicaraguan economy has been vulnerable to significant natural risk. Besides creating unexpected fiscal liabilities, disasters also result in increased imports, particularly of food grains under drought conditions and also of capital equipment for infrastructure rebuilding following sudden onset disasters, such as hurricanes and earthquakes. Protection of the poor, the effective functioning of factor markets, sustainable agricultural growth, and efficient resource use through private sector development are key elements of the Bank's strategy in Nicaragua, as articulated in the most recent Bank Country Assistance Strategy. By transferring Nicaraguan natural hazard risk to international capital markets and by stimulating the domestic development of insurance instruments, the proposed project would thus contribute to the main objectives of the Bank strategy.

Estimates show that the repeat of a 1994-intensity drought would cost about US\$60 million, about one-tenth of agricultural GDP; the costs would fall most severely on the poorest. Rapid onset disasters, such as those caused by excessive rainfall, floods, and earthquakes have major macroeconomic costs, also with a disproportionate impact on the poor. The unprecedented losses to production and public infrastructure in the wake of Hurricane Mitch in October 1998 represent the most recent example of the impact of flooding. The total costs of the disaster were estimated at between US\$500 million and US\$1.5 billion. Agricultural sector losses were estimated at between US\$100-150 million. Managua's earthquake in 1972 caused huge damage to public property, businesses, and home dwellings.

The primary goal of this project is to establish market-based insurance to protect the Government of Nicaragua (GON) from fiscal risks due to catastrophic natural disasters. By thus transferring risks to international financial markets, the project will support GON's efforts to prepare for disasters rather than just reacting to them. Since the successful placement of insurance could trigger payments to GON, the project, although relying principally on ongoing GON and Bank initiatives, would help further develop a transparent framework for disaster relief and reconstruction. Also, using the infrastructure and pricing benchmarks created by GON's insurance contract, the project will identify approaches to stimulate the increased private use of insurance against the income shocks caused by natural hazards. The project will primarily focus on risks arising from extreme rainfall events: droughts and floods. But it will also seek to provide insurance against other catastrophic risks, e.g., from earthquakes.

This project will contribute to the Government's objective of more control over financing of disasters and to transparency in the delivery of relief and reconstruction. To gain greater control over the financing of disaster relief and reconstruction, the National Congress has recently approved a Disaster Relief Law (*Ley Creadora del Sistema Nacional para la Prevención, Mitigación y Atención de Desastres*) under which a National Disaster Fund and the guidelines for the effective deployment of available funding will be established. Especially prone to disaster is agriculture, which contributes over one-third of Nicaragua's GDP and productive employment and over three-quarters of the country's exports. With only 8 percent of the cropland irrigated, drought has been a constant threat, with one of the most severe droughts in the past 30 years experienced in 1994, followed by a less serious but extensive drought in 1997/98. Droughts do not have a major macroeconomic effect in Nicaragua, but, as in 1994, they target the poor through extensive crop failure among the vast numbers of small producers of basic grains, such as maize, beans, and even the drought-resistant sorghum.

Mexico: Weather-based Index Insurance. The Mexican national insurance system for the rural sector is undergoing important changes. Proposals call for the removal of AGROSEMEX, the state agricultural insurance company, as a direct provider of insurance to farmers and converting it into a re-insurance company. The government also wishes to develop new insurance products, expand the insurance coverage, particularly to small farmers, and develop ways to re-insure catastrophic risk in the agricultural sector. Weather-based index insurance is a relatively new insurance instrument whose payouts are based on the occurrence of a weather event, rather than on actual crop losses. The key advantage to this kind of insurance is that the weather or "trigger" event (e.g. a rainfall shortage) can be independently verified, and therefore not subject to the possibilities of manipulation which are present when insurance pay-outs are linked to actual farm losses. And since the contracts and indemnity payments are the same for all buyers per unit of insurance, the usual problems of moral hazard and adverse selection associated with public crop insurance are lessened. Besides, the insurance would be easy to administer, since there are no individual

contracts to write, no on-farm inspections and no individual loss assessments. This can help make the insurance affordable to a broad range of people, including agricultural traders, shopkeepers and landless workers whose incomes are also affected by the insured events.

Results from a feasibility analysis indicate that there is a good potential to develop such insurance for certain regions in Mexico. The correlation between yields and rainfall levels for 40 percent of the planted areas in four states ranges between 60-80 percent. The analysis also showed that rainfall contracts could reduce yield risk by at least 23 percent for 40 percent of the planted area in these four states. Since traditional crop insurance is neither the most appropriate nor an affordable means for resource poor small farmers a weather-based index insurance should be considered to test whether such savings can be achieved in practice.

Appendix 5 Gender Dimensions of Rural Development: A Diagnostic

Introduction and Summary

This appendix describes gender issues in the rural context. It focuses on the productive sphere—both agricultural and non-agricultural—as well as key inputs to raising productivity such as land, improved technology and financial services.⁴⁶ Gender issues in reproduction, education and literacy and violence are raised to the extent that these affect to women's and men's production and productivity decisions and opportunities in varying degrees.

Gender roles in agriculture and non-agricultural production vary widely by country, region, and ethnicity. They are also dynamic and relational, with the roles of women being influenced by men and vice versa. The Appendix shows that to improve the lives of the rural poor, rural development (RD) programs need to take into account these gender roles and how these intersect with the reproductive and community spheres. The reason is that these roles dictate men's and women's opportunities and constraints, contributing to and benefiting from the economic, social and political development of rural areas.

Region and ethnic-specific variations in roles notwithstanding, a broad generalization can be made about men's and women's dominant societal roles in the region. In rural societies in particular, the pattern continues to be that women are responsible for domestic and childcare responsibilities and that men will provide the primary source of household income. Women also work in productive activities but for those who are wives, this is for the most part secondary to their domestic responsibilities. Single mothers, in contrast, are a special group in that they need to juggle both domestic and reproductive activities. Husbands who are in conjugal households may help or even play a dominant role in domestic chores such as fuel and water collection, but housework remains almost the exclusive domain of women.⁴⁷

The area of reproductive health services – and in particular culture-specific family planning – should therefore be one of the key rural development investment strategies. Such a strategy would have direct payoffs for women by facilitating their participation in productive activities. Indeed, lessons from Bank projects in countries as diverse as Ecuador and Argentina indicate that it is insufficient to promote women's productive projects without considering their childcare and corollary domestic burdens. Women, but also men, are vocal about this critical need. Offering safe and culturally sensitive family planning services also has important secondary effects on men by reducing the dependency ratio and required income levels to sustain the family.

To increase men's and women's productivity and earnings, another integral part of the rural development strategy should be to promote both the agricultural and non-agricultural sector. The former continues to be a major source of employment for men whereas the non-farm sector is especially important for women given the household and care giving constraints they face. However, there is still scope for improving opportunities for women in agriculture. The sector is critical to many female farmers, as the increase in female farmers due to male migration. Moreover, women face additional constraints vis-à-vis their male counterparts in accessing key inputs of agricultural production such as land, credit and improved technology. A rural development strategy that invests in both rural women and men is justified in terms of equity given the rising number of female household heads. It is also justified on efficiency grounds given that empirical studies worldwide have shown that women typically spend a high proportion of their income on food and health care for children, as well as goods for general household consumption. In contrast, men retain discretionary control over a higher proportion of their own incomes for personal expenditures.

Continuing to improve equal distribution of land by gender through mechanisms such as joint land titling and giving preference to female household heads would be another key aspect of the rural development strategy. Land is a critical asset for male and female farmers in terms of increasing agricultural productivity but it is also a key determinant of poverty. Land affects an individual's ability to bargain over the allocation of labor, income and other inputs and, as such, influences household welfare. Land is also an important source of income security during old age.

Lastly, while short term strategies should focus on the immediate and acute needs of the rural population – which for men tends to be in the productive area and for women in the dual reproductive-productive sphere – long term measures need to focus on the equality or “sharing” of gender roles. Inflexible roles can lead to the inefficient allocation of labor and resources. Gender roles have been identified as a fundamental source of male-female structural barriers to economic parity which influence men’s and women’s work, productivity, and earnings (Blau, 1998). For men, gender can lead to destructive and dysfunctional behavior such as violence, alcohol and substance abuse and depression (Pyne, 2000, Barker 1998). While a long-term endeavor, the education system (and in particular the reduction of sexual stereotypes), the media and development projects broadly can influence gender roles in society and eventually have a positive impact on profitability and growth. Programs now exist for example, in rural Peru and Mexico, to break down negative male stereotypes and increase male roles in fathering.

The Appendix is organized in the following way. The first section describes the rural labor force broadly, followed by discussions on the agriculture labor market, the non-farm sector, the micro-enterprise sector and rural unemployment. The second section describes gender-specific barriers and constraints including those related to land, agricultural technology and financial services, fertility levels, time use, education and violence.

The Rural Labor Force

While female labor force participation in the region has increased overall, official statistics indicate that rural women's participation is much less than that of rural males and that of their female urban counterparts. As shown in Table A5.1, male participation is 24-38 percent for rural women, compared to 79-87 percent for rural men and 44-56 percent for urban women, the latter being almost double that of rural women. Pagan and Sanchez (1998) found that compared to working men, employed women were more likely to be single, to be heads of households, and to belong to households with fewer children. The latter demonstrates a sex division of labor among couples which assigns to women childcare and domestic responsibilities and to men the role of family provider. According to their analysis, levels of education for economically active men and women were comparable.

Disaggregating the labor force by agricultural and non-agricultural production reveals interesting gender differences. In the three countries for which data are shown in Table A5.2, employed men are predominantly engaged in agriculture whereas women workers are concentrated more in non-agricultural work and less so in agriculture. The proportion of working men in agriculture ranges from about 58 to 78 percent compared to about 19 to 38 percent for women. In Chile, the proportion of men employed in agriculture has decreased over the last decade and increased or remained stable in El Salvador and Colombia over the same period. The proportion of women workers in agriculture has remained stable or increased over the last decade according to official information for the three countries.

Table A5.1: Labor Force Participation, by Sex in Select Countries, 1997, 1998

Country	Male		Female	
	rural	urban	rural	urban
Colombia	81	80	38	56
Chile	79	77	24	44
El Salvador	87	77	30	51
Nicaragua	85	73	28	46

Sources: Colombia (1998 Departamento Administrativo Nacional de Estadística Household Survey); Chile (1998 Encuesta de Caracterización Socioeconómica Nacional); El Salvador (1997 Multi Purpose Household Survey); Nicaragua (1998 LSMS)

Table A5.2: Proportion of Male and Female Rural EAP Engaged in Agricultural and Non-Agricultural Activities in Select Countries, 1987-1998

Country	Year	Female EAP		Male EAP		Total EAP	
		agric	non-ag	agric	non-ag	agric	non-ag
Chile	1987	36.5	63.5	77.9	22.1	71.6	28.4
	1992	38.3	61.7	72.9	27.1	66.5	33.5
	1998	37.4	62.6	67.3	32.7	67.3	32.7
El Salvador	1995	23.3	76.7	69.9	30.1	57.7	42.3
	1996	23.0	77.0	72.3	27.7	59.5	40.5
	1997	21.7	78.3	70.0	30.0	57.6	42.4
Colombia	1988	21.3	78.7	64.1	35.9	52.1	47.9
	1995	18.5	81.5	58.3	41.7	54.2	45.8
	1998	27.4	72.6	70.4	29.6	55.0	45.0

Sources: Colombia (1998 Departamento Administrativo Nacional de Estadística Household Survey); Chile (1998 Encuesta de Caracterización Socioeconómica Nacional); El Salvador (1997 Multi Purpose Household Survey)

IICA/IDB studies carried out throughout the Region, however, suggest that official statistics fail to consider a significant proportion of women's on-farm work. Problems in measuring women's labor in agriculture include biases among census-takers that only men are farmers; information based on self-declarations (most women consider it to be higher status to be a housewife than a farmer); and women's perceptions that their agricultural labor to be an extension of their domestic duties.

But even though women's agricultural work is likely underestimated, the non-farm sector is likely to provide greater opportunities for women than on-farm work because the latter presents less barriers to entry and may be more

compatible with women's domestic responsibilities. Chiriboga et al (1995) report that in Central America, women's involvement in agriculture is lowest in countries where plots are located further from the rural home, as in the case of Honduras. These findings are consistent with worldwide trends that rural women tend to concentrate their work around the homestead because of their domestic and reproductive roles (Saito and Spurling, 1992).

Gender participation in agriculture can also be strongly differentiated by region and ethnicity, as is the case of Ecuador. Evidence there suggests that the gender division of labor is significantly more restrictive among the *mestizo* in the coastal areas than among the inhabitants of inland areas.

Agricultural labor

Division of Labor. As in other parts of the world, farming systems in the region are heterogeneous and dynamic with male and female roles in agriculture varying significantly by region, country and ethnicity. Broadly, however, cultural ideals in the region continue to categorize housework as the main role of women and field work as men's domain, however, in practice men and women often work side by side and share agricultural responsibilities (Quisumbing, 1994). And cultural factors such as the relative importance of Hispanic versus Indian traditions; social class, i.e. whether income of wages; labor market conditions; and the degree of market integration of the peasant economy are factors affecting the division of division of labor (Ashby, 1985, cited in Quisumbing, 1994). For example, when men work off-farm, women have higher rates of participation in traditionally male tasks. In Guatemala, while women account for only nine percent of labor in maize, they contribute a quarter of family labor input to growing traditional and export vegetables (Quisumbing, 1994). In Peru, women's share of labor input across all crops is 25 percent (Deere and León, 1982). In Nicaragua, men are less active in the crops where women's contributions are greatest, that is, vegetables, sesame, and small livestock production, while women are less active in the areas where men are most active, that is, in sugar cane, banana and fruit production (World Bank, 1997b).

According to indigenous profiles prepared by the World Bank for Guatemala and Panama, both men and women are involved in agriculture tasks among the Manyans, Cunas and Emberras and Wounaans (see **Table A5.3**). In terms of livestock, only among the Mayas do both men and women participate; men are responsible for this task among the other Cunas and Emberras and Wounaans groups. For all groups, women are the sole caretakers of domestic animals.

A look at Ecuador demonstrates the extent of regional and ethnic variations within a country. Studies of indigenous small farmer households in the Ecuadorian Sierra indicate extremely high levels of both men's and women's participation in all phases of agricultural production and natural resource management (Hamilton 1998). Over 90 percent of women in one indigenous highland community report that they participate equally with their husbands in the planting, cultivation (including pesticide and fertilizer spraying), and harvest of crops, as well as the care of livestock, on average contributing about 47 hours a week (ibid.). The only task to which women generally do not contribute their labor is plowing. In contrast, due in part to a stronger "domestic ideology" that confines women to home-based activities, women's role in agricultural production in the Costa is more commercially oriented. It is concentrated in post-harvest processing such as shucking corn and drying rice and cacao (Phillips 1989) as well as income generating activities such as raising chickens and pigs for market.

But as previously mentioned, systems are dynamic and are influenced by a range of factors – even environmental degradation. A World Neighbors/ International Center for Research on Women (ICRW) case study in Honduras found that whether driven by environmental degradation (measured in terms of the soil quality available for corn production) and/or opportunities to earn income for essential household expenses, as men shift labor to off-farm wage work, women increase their involvement in growing corn (Casey and Paolisso, 1996).

Table A5.3. Gender division of labor among indigenous in Guatemala and Panama

<i>Indigenous group & Family</i>	<i>Agri-culture</i>	<i>Livestock</i>	<i>Domestic animals</i>	<i>Pottery</i>	<i>Handi-Crafts</i>	<i>Seasonal Agric. Work</i>	<i>Textile s</i>	<i>Others Canastas, huipiles, moles & chacaras</i>
Guatemala								
Maya								
Men	x	X					x	
Women	x	X	X	x	x		x	X

Table A5.3. Gender division of labor among indigenous in Guatemala and Panama

<i>Indigenous group & Family</i>	<i>Agriculture</i>	<i>Livestock</i>	<i>Domestic animals</i>	<i>Pottery</i>	<i>Handi-Crafts</i>	<i>Seasonal Agric. Work</i>	<i>Textile s</i>	<i>Others Canastas, huipiles, moles & chacaras</i>
Panama								
Emberra/Wounaan								
Men	x							
Women	x		X			X		X
Kunas								
Men	x	X						
Women	x		X					X

Source: Tornqvist (2000), constructed from World Bank indigenous profiles.

Box A5.1: Agriculture Decision-Making in the Ecuadorian Sierra

Women in the Sierra of Ecuador report that decision-making, as well as labor, is egalitarian in nature: more than 80 percent of a Sierran sample considered that they had equal control over land use, financial management, and product use decisions within their households. Seventy percent of the same sample said that they participated equally in technology selection. "In contrast with the expectations of many development professionals, women are equal partners in decisions regarding agricultural technology on farms of all sizes and among market-oriented producers using higher levels technology, independent of whether their husbands are absent from the farm" (Hamilton 1998: 180).

Source: World Bank, 2000

Decision-Making. According to surveys conducted by IICA/IDB throughout the region, both men and women are involved in decision making related to most areas of farm production. On average, women surveyed indicated that they alone make 31 percent of production decisions, whereas men make 25 percent of decisions on their own and 45 percent of decisions are shared (Kleysen, 1996). Three decision-making patterns emerged from the survey results. First, in a set of countries, about half of the decisions were shared and the remainder were divided between men alone and women alone – this was the case in Central America and Andean countries (**Box A5.1**). Second, decision-making is more of a shared activity between men and women (56 percent), with men tending to make a much larger percentage of decisions alone (31 percent) than women (13 percent) – Paraguay, Uruguay and Brazil exhibited these patterns. Third, about half of the decisions were shared (42 percent) and women alone made the largest proportion of the decisions (47 percent) with men making only 12 percent of decisions (ibid.).

Non-agricultural labor

In rural areas of Latin America and the Caribbean, the non-agricultural sector employs a large segment of the work force and is particularly important for women. Hazell and Hagblade (1993)

estimate that 79 percent of women in the rural wage-labor force in Latin America are employed in non-agricultural activities (cited in Lanjouw, 1998). Over the last decade, the sector has accounted for about 63-82 percent of the female EAP compared to 28-48 percent of the male EAP in Chile, El Salvador and Colombia (see **Table A5.2**). In Mexico, gender disparities in employment rates are highest in regions with large agricultural sectors and lowest in regions with more diversified off-farm employment opportunities (Katz and Correia, forthcoming).⁴⁸ In Ecuador, where 40 percent of rural incomes come from non-agricultural sources (both wage labor and home enterprises), the sector is also more important for women than men: 37 percent of the male labor force (outside of home enterprises) has either a primary or secondary occupation in the non-farm sector but the proportion is almost 50 percent for women (Lanjouw, 1998). The sectors in which men and women participate also vary. In the case of non-agriculture wage-labor in Ecuador, the most important sector for women is commerce, which accounts for two-fifths of women and only one-fifth of men who are employed in this sector. In contrast, men's principle activities are in construction, manufacturing, fishing and transport.

The non agriculture sector can have important equity and social welfare benefits and can contribute to household earnings, employment creation, and overall economic growth. According to Lanjouw (1996), even low productivity

non agricultural activities – which are common particularly among rural women than men – may serve to reduce aggregate income inequality, offset season agricultural unemployment, and offer economic security to those who are unable to participate the agricultural labor force. In addition, given the rigid delineation of gender roles in rural areas, the non agriculture sector is in most cases more compatible with women’s domestic responsibilities.

One of the major changes in the Colombian rural economy over the past decades has been the increase in non-agricultural activities. As of 1993, commerce and services accounted for 11.2 and 14.7 percent of rural employment, respectively (Jaramillo 1998). And as in Ecuador, men and women are likely to be concentrated in different types of activities in the non-agriculture sector. While men have benefited disproportionately from the expansion of rural manufacturing, women have taken advantage of opportunities in marketing, food service, and other non-agricultural sectors. The proportion of women deriving income from such jobs increased from 26 percent in 1988 to 34 percent in 1995 (ibid.).

In her analysis of off-farm employment patterns among *ejido* residents in Mexico, and the variations in such patterns among men and women of different generations in the context of institutional and macroeconomic reform, Katz (forthcoming) makes a number of conclusions:

- First, she finds that wage income opportunities, and the availability of jobs in non-agriculture, are quite unevenly distributed among the major rural regions of Mexico with important consequences on the gender composition of the labor force. This is because labor market competition and sectoral allocation – which may be influenced by employer discrimination and/or preferences of potential employers – differentially affect the ability of men and women to obtain off-farm jobs. Based on her analysis, Katz also finds that women are more likely to obtain skilled or semi-skilled jobs, while men are filling unskilled positions.
- Second, while women's overall labor force participation rates remain low in *ejido* communities, the younger generation is beginning to catch up with their male counterparts – and actually significantly exceeding their duration of off-farm employment in a given year. However, since the majority of these women are still single, it is unclear whether they will continue to work once they marry and form households of their own – in other words, whether daughters' high off-farm employment rates continue, represent a truly generational or a short-term lifecycle phenomenon.
- A third major finding concerns the relationship between farm-based assets and income and the decision to participate in the wage labor market. All household members are less likely to work off-farm – and to work for shorter time periods – if they have relatively large livestock holdings. However, this inverse relationship is especially strong for male household heads. Together, these results suggest the existence of some degree of private appropriation of farm-based income and assets among the *ejido* population, which in turn influences individuals' labor supply decisions.

Self Employment. In the case of Mexico, self-employment among women increased substantially in the first half of the last decade, especially in non-agricultural sectors (Parker, 1995, cited in Pagan and Sanchez, 1998). From 1991 to 1995, women accounted for 68 percent of the rise in non-agricultural self-employment (Pagan and Sanchez, 1998). In more rural areas, female non-agricultural self-employment increased by almost 90 percent during the same period (ibid.). This phenomenon is not unique to Mexico, as recent trends in the U.S., Canada, and Argentina show similar female self-employment growth patterns (Devine, 1994; Cohen, 1996; cited in Pagan and Sanchez, 1998). During the early 1990s, the number of women joining the workforce in Mexico increased dramatically (Brown, Pagán and Rodríguez, 1997) while men’s decreased slightly. However, gender differences have decreased in self-employment in particular, both in rural and less urban areas. Looking specifically at Puebla, Guanajuato, and Veracruz (Mexico), Pagan and Sanchez (1998), find that while 29 percent of rural women and 87 percent of rural men are employed, men’s and women’s self-employment rate are very similar (30 percent of working rural men compared to 29 percent of working rural women). Their analysis of the data find that most of the labor force differential is due to supply side factors such as preferences, time constraints, and work opportunities, as well as demand side factors such as exclusionary practices by male-dominated trade unions, employer preferences, or statistical discrimination.⁴⁹ Demand factors can, in turn, influence labor supply decisions by affecting the inter-temporal return to the labor force, female perceptions on the value of being employed and, ultimately, the decision to join the workforce, the sectoral choice, and investments in schooling.

Given high unemployment rates for rural females (see below), the World Bank’s 1996 *Review of Colombia's Agricultural and Rural Development Strategy* placed a great deal on the non agriculture sector and micro-enterprise development. The *Review* argues that because they typically require less travel away from the home, small businesses potentially offer more practical employment opportunities to women with dependents than itinerant farm

work (World Bank, 1996a). Specifically, the report suggests that public policy and investment be geared towards creating an "enabling environment" for such women-run rural small businesses, including the reform of rural financial markets to facilitate capitalization (World Bank, forthcoming).

Pagan and Sanchez (1998) make the following recommendations after studying the rural non-agriculture micro-enterprise sector in Mexico from a gender perspective. First, provide broad-based formal and informal education and training programs to aid potentially successful entrepreneurs – and women in particular – to obtain basic business and literacy skills, expand individual choices, improve responses to market opportunities, and increase productivity. Second, provide services to entrepreneurs to help them manage their businesses more effectively, increase access to information and technology, and manage risk. Third, work towards improving the gender business environment so that entrepreneurs can enforce contracts and have lower costs of accessing professional services, output and input markets, information, training and technology. The latter in particular, will have the effect of increasing competition and reducing the potential of gender-based discrimination in access and opportunities in the micro-enterprise sector. In addition, Lanjouw (1998) recommends improving infrastructure that would facilitate women's commercial activities. Lastly, financial services need to be tailored to both the needs of both male and female entrepreneurs, taking into account the sectors and locales in which they operate and different sizes of operations.

Household expenditures by income earned

A number of studies conducted in the 1980s suggest that women and men spend income under their control in systematically different ways (Guyer, 1980, Dwyer and Bruce, 1988). Women typically spend a high proportion of their income on food and health care for children, as well as goods for general household consumption. In contrast, men retain discretionary control over a higher proportion of their own incomes for personal expenditures. These findings were subsequently confirmed by more recent studies that provide quantitative measures of the different effects of men's and women's incomes. Many of these studies have already attempted to control for unobservable household and community factors and the endogeneity of women's labor income. The evidence shows that women's income has a greater effect on household food security and preschooler nutrition than men's income. In Guatemala, the average yearly profits from non-traditional agriculture export crops would increase household food expenditures by twice as much if they were controlled by women rather than their husbands (Katz, 1992). In Brazil, the effect of women's unearned income on child survival probabilities is almost 20 times higher than that of men's unearned income (Thomas, 1994).

Rural unemployment

As demonstrated in Table A5.4, significant gender gaps exist in unemployment for two of the countries for which data are shown. Gaps are smaller in El Salvador, and unlike in Chile and Colombia, favor women: the male rate of unemployment is as much as triple the female rate in El Salvador. In Chile, female rates are consistently about double the male rates. But the biggest gaps are in Colombia and these favor men. Female unemployment rates in Colombia are between 3.0 and 4.5 times higher than rates for men. The situation is even worse among younger female workers. For example, the comparable unemployment rate for women under 25 years old was 25 percent, and for rural men only two percent (1998 statistics). In Nicaragua, according to the 1998 LSMS, rural women also have a higher unemployment rate (14 percent) than rural men (8 percent) (Ilahi, 1999).

Table A5.4. Rural Unemployment in Select Countries, 1987-1998

<i>Country</i>	<i>Year</i>	<i>Female</i>	<i>Male</i>
Chile	1987	11.2	6.4
	1992	6.0	2.5
	1998	13.1	7.3
El Salvador	1995	5.8	8.7
	1996	6.0	7.7
	1997	3.1	9.8
Colombia	1988	9.6	3.0
	1995	14.2	3.2
	1998	14.5	4.8

Sources: Colombia (1998 Departamento Administrativo Nacional de Estadística Household Survey); Chile (1998 Encuesta de Caracterización Socioeconómica Nacional); El Salvador (1997 Multi Purpose Household Survey)

Household labor

Household time-intensive chores, such as water and wood collection and childcare, can alter time use patterns and labor allocation within the household and affect productivity and earnings. In many developing countries of the

world, these tasks are relegated to women but recent studies suggest other time use patterns in Latin America. Using LSMS 1994 and 1997 data for Peru, Ilahi (1999a) examines the relationship between household infrastructure and time use and finds a weak link. According to his analysis, infrastructure variables do not have an effect on the total time household members spend in housework. Interestingly, women in households using firewood, or without in-house water supply do not have significantly higher work burdens than women who do not. In terms of the composition of work, women in rural households with fuelwood or coal as the source of energy tends to devote a smaller share (about 10 percent) of their time to self-employment activities. They also allocate a greater share to housework compared to their counterparts who use modern fuels.

In terms of water, Ilahi's (1999a) results suggest that it is the men who respond to changes in provision of piped water services. In households that do not have in-house water, men have a lower propensity to participate in wage work and they tend to allocate a greater share of their time to self-employment activities, such as agriculture. This suggests that there may be complementarities between farm work and water collection, which men are able to make use of. After controlling for source of water supply, an additional hour of public water supply at home allows men to increase the share of self-employment activities by reducing their time in housework, though the latter effect is below the 10 percent level of significance. The results for women are all insignificant. Again this suggests that as far as water infrastructure is concerned, men would benefit more from the provision of in-house water supply. Results from Peru are consistent with findings of a rural water and fuel-wood survey (1994) carried out in El Salvador. This survey found that all household members participate in water collection for household consumption, but that men largely bore a greater share of the responsibility because they were able to collect water on their way from their field work (World Bank, 1996a).

In Nicaragua, a time use module included in the 1998 LSMS found that men spend a lot more time than women in fuelwood collection activities but that women predominate in water collection (Ilahi, 1999b). As a corollary, analysis of the data found that access to modern fuels such as gas or kerosene lowers the work of men but not of women (ibid.). In-house access to tap water significantly lowers the work time of adult women (ibid.).

Housework continues to be a female responsibility in Latin America. In Nicaragua, Ilahi (1999b) also identified a sharp division of labor by gender based on time use survey included in the 1998 LSMS. Women do most of housework (5.5 hours per day) compared to men who on average contribute 1.5 hours per day. Ilahi's (1999a) time use study for Peru using LSMS panel data demonstrates a stark contrast in the amount of time men and women dedicate to housework. Housework accounts for on average 70 percent of the work effort of women but only 25-35 percent of the work performed by men. He also found the following:

- Overall work burdens were higher in rural (58 hours per week for women and 50 hours per week for men) than in urban (49 hours per week for women and 43 hours per week for men) areas.
- Female heads in rural areas tend to spend a lower proportion of their time in housework and are more likely to participate in self-employment activities. The same is not true for male heads in rural areas.
- Education has little effect on time use in rural areas, predictably because labor markets that reward education do not exist in rural areas.
- The presence of elderly women allows working age women in the household to increase their time in self-employment activities in both rural and urban areas. For men, elderly women in the household lower the tendency of rural working age males to do housework.

According to Ilahi (1999a), there are two competing views about why time use patterns differ by gender in developing countries. On the one hand some argue that social roles and norms dictate a segregation of activities by gender. Women are predominantly found doing household chores and men in income generating activities, because those are largely the roles society prescribes for them. On the other hand, economist and behavioral scientists have contested that men and women in developing countries respond to economic incentives and constraints to alter their time use. An extreme position in this regard is that work activities are divided along the lines of comparative advantage, with men being better at market work and women at housework. However a more tempered neo-classical view argues that male-female time use responds to economic changes as much as other behavioral factors such as consumption.

Migration

According to IICA/IDB data compiled for Costa Rica, Honduras and Guatemala, men are more likely than women to leave rural areas to seek permanent work (see **Table A5.5**). The proportion is 30 and 20 percent for men in Honduras and Guatemala respectively compared to 20 and 8 percent for women (Chiriboga, et al 1995). Guatemala displays no gender differences in terms of absences due to temporary work but gender gaps do exist for both Costa Rica and Honduras (ibid.).

Migration patterns are more similar for men and women in Ecuador, where rural-to-urban migration continues to be high by Latin American standards and contributed to 42 percent of total urban growth during the 1980s (United Nations 1996). Nationally, Ecuadorian women made up 56 percent of all rural-urban migrants in the 1960s and 50 percent in the 1970s (Singelmann 1993). In the particular case of the Sierra region, unequal land distribution and small average farm size, combined with a highly imperfect capital market and limited off-farm employment opportunities (especially for women), has led poor rural families to use both temporary and permanent migration as part of their “survival strategies.”⁵⁰

Table A5.5: Percentage of Production Unit Members Working Off-Farm, by Gender

Country	Temporary Work		Permanent Work	
	Men	Women	Men	Women
Costa Rica	27	16	11	9
Honduras	27	13	30	20
Guatemala	17	17	20	8

Source: IICA/IDB survey (Chiriboga et al, 1995)

In the case of Ecuador, evidence from the 1970s suggests that the forces driving women from the rural Sierra into the cities were quite different from those influencing male migration during the immediate post-oil boom period. A study based on ILO data from 1977-78 found that rural Sierran women migrating for economic reasons (i.e. in search of work) were on average younger, less educated, and more likely to be single than their male counterparts (Bilsborrow et al. 1987). Moreover, the likelihood of female migration was found to be positively associated with (non gender-disaggregated and possibly male biased) off-farm rural employment opportunities, and not

significantly affected by either household farm size or distance to Quito – results exactly the opposite of those found for male economic migrants (ibid.). Bravo-Ureta et al. (1996), combining data from the 1974 and 1982 censuses, likewise demonstrate significant gender differences in the effects of macro-structural variables on internal migration in Ecuador during this same period. Women are found to respond more strongly than men to the degree of urbanization and extent of agrarian reform activities, and less strongly to origin-destination gaps in literacy rates, population densities and mean income levels.

Land

For women and men in rural households, access to land is a key determinant of poverty and is a crucial asset for production and collateral. In terms of gender, land ownership and access is also a determinant of an individuals’ ability to bargain over the allocation of labor, income and other inputs into household welfare (Doss, 1996). Finally land is important as a source of income security during old age, both directly (as the basis for agricultural production and/or rental income) and indirectly (insofar as adult children are more likely to assist their elderly parents if they can expect an inheritance transfer).

Household Effects. A growing body of theoretical and empirical literature on intra-household resource allocation shows that individual access to income and assets affects the allocation of labor and expenditures and other important household decisions such as nutrition, health care and fertility. See Lundberg and Pollak 1993; McElroy and Horney 1981; Ott 1995; Schultz 1990; Thomas 1990. In the particular case of rural households, land is crucial in determining individuals’ “fall back positions” or “threat points,” which in turn influence their ability to bargain over the allocation of labor, income and other inputs into household welfare, as well as their participation in extra-household institutions. Land market reform that reallocates property rights between men and women is therefore likely to have wider implications for the rural household economy, the well-being of household members and women’s role in the larger community.

The distribution of property rights in land among household members takes on special significance during times of transition in household composition brought on by death, divorce, migration and other lifecycle events. For women, their ability to retain land rights if they are abandoned or widowed, or during their husbands’ migratory absence, is

key to their capacity to generate income. This is so, either directly (as the basis for agricultural production and/or rental income) or indirectly (insofar as adult children are more likely to assist their elderly mothers if they can expect an inheritance transfer). In Mexico, for example, the migration of men from the ejidos has left women in charge of agricultural production, transactions and dealings with Government authorities to an unprecedented extent. However, insofar as women remain users but not owners of their husband's land, they are constrained in their abilities to access the credit market and important Government services (Katz 1998).

Enhanced property rights may strengthen women's participation in community-level social and political institutions. Again in Mexico, of 79 surveyed ejidos in which women have any representation on the governing bodies, the average proportion of female ejidatarios was significantly higher than on the 204 ejidos where women were absent from the leadership (*ibid*). This is important in its own right, and also because greater gender equity in the composition of local institutions can influence the resource allocation and norm-setting activities of these groups.

Gender and Land Reforms in LAC. Perhaps the most useful summary of gender and the Latin American experience with land reform and "counter-reform" is Deere and León (1998). They review outcomes in eight countries (Chile, Colombia, Costa Rica, El Salvador, Honduras, México, Nicaragua, and Perú) that have undergone significant redistributions of agrarian property and are now carrying out some combination of privatization and titling. They argue that the agrarian reforms of the 1960s and 70s were characterized by significant male bias in the distribution of land. Typically, only heads of household were designated as beneficiaries, and this was exacerbated by the preference given to former permanent agricultural workers (who were disproportionately male) and inheritance laws favoring male heirs. As a result, women constituted between 4 and 15 percent of agrarian reform beneficiaries in the eight countries. It should be noted here that the issue may not be one of 'male bias' but rather a bias towards household heads, who are perceived or reported to be male. A Fundación Arias study of land tenure in El Salvador found that of 137 female and 1,035 male self declared household heads who had solicited land, 65 percent of female heads and 82 percent of male heads had benefited from the first round of agrarian reform. By the third round, among those having received titles no gender differences in household headship were apparent (Fundacion Arias, 1992).

Nonetheless, to varying degrees, the new legislation supporting the "counter-reforms" is a significant improvement over the original agrarian laws in terms of gender. In most countries, household heads are no longer the sole designated beneficiaries and provisions for joint titling exist in countries such as Colombia, Costa Rica, Honduras, and Nicaragua. In Colombia, priority is given to female household heads and victims of social violence in the allocation of land. In El Salvador, women constituted 33 percent of all FMLN ex-combatants and sympathizers to receive land as part of the Peace Accords (data as of March 1996). In Nicaragua, pressure from the women's commission of the national peasant association (UNAG) coupled with a successful training program for government functionaries and beneficiaries led to women making up 21 percent of all PNCTR (Programa Nacional de Catastro, Titulación y Regularización de la Propiedad). Women received 40 percent of all individual titles and 21 percent were joint titles. In Costa Rica, opposition on the part of male peasant organizations led to the reversal of a historic legal provision establishing titling in women's names when couples are in consensual unions, which had increased women's participation in state-sponsored land redistribution programs to 39 percent in 1990. Finally, a World Bank financed project in Chile granted titles to female household heads by *inter alia* simplifying legal procedures (Quisumbing 1994).

More recent data compiled by Deere and León, which are provided in **Table A5.6**, indicate that the most gender equal reforms took place in Chile, where about 45 percent of plots and 40 percent of farms were titled to women. Ecuador's rural development project PRONADER – which the World Bank has financed – granted the highest number of joint titles, about 70 percent. The biggest gap is in Mexico, where women are 21 percent of beneficiaries of certified ejido land, compared to 79 percent for men.

These improved outcomes indicate that Governments, national women's NGOs, and international financial organizations (including the World Bank) have made significant efforts to improve the gender balance in property rights and ownership. But very little empirical evidence exists to show the relevance of gender in affecting the results of these programs or the effectiveness of Government programs in reducing gender gaps. Since the current generation of land registration, titling and purchase programs are all at different stages of planning and implementation, the timing is propitious for such work to take place.

Table A5.6. Land Ownership and Titling Statistics by Sex from Select Countries, 1992-96

<i>Country</i>	<i>Year</i>	<i>Unit</i>	<i>Women</i>	<i>Men</i>	<i>Couples/ Joint</i>	<i>Other</i>	<i>Total</i>
Colombia	1996 titling public lands	Number	2,107 (30%)	3,193 (45%)	1,753 (25%)	-	7,158 (100%)
		Ave. Size (ha)	13.5	17.4	18.5	-	16.5
	1997 titling public lands	Number	1,472 (31%)	2,320 (49%)	975 (20%)	-	4,767 (100%)
		Ave. Size (ha)	18.2	22.6	28.9	-	22.5
Ecuador	1992-96	Titles Issued by PRONADER	1,596 (13%)	1,135 (17%)	8,685 (70%)	-	12,416 (100%)
		Ave. Size (ha)	1.19	0.81	1.21	-	1.15
	1996	Sierra (n=75)	23%	50%	57%	-	100%
		Coast (n=75)	6%	66%	28%	-	100%
Brasil	1996	Santa Catarina (n=50)	6%	42%	46%	6%	100%
		Parana (n=50)	6%	67%	15%	13%	100%
Chile	1993-96	Land Title Plots	359 (45%)	432 (55%)	-	-	791 (100%)
		Land Title Farms	272 (40%)	411 (60%)	-	-	683 (100%)
Mexico	Certified ejido land as of Jan 1997	Ejidatarios	168,702 (17.5%)	745,909 (82.5%)	-	-	914,611 (100%)
		Posesionarios	26,254 (22.0%)	93,089 (78.0%)	-	-	119,343 (100%)
		Avencindados	114,440 (29.8%)	269,412 (70.2%)	-	-	383,852 (100%)
		Total	309,396 (20.8%)	1,108,410 (79.2%)	-	-	1,417,806 (100%)

Source: Constructed from Deere and León (2000)

Agricultural Technology

The literature on gender and agriculture points to women's lack of access to agricultural technology and extension services (Saito and Spurling, 1992, Quisumbing et al. 1998, Kleysen, 1966). This is the case in El Salvador, where women comprised about 12-13 percent of the recipients of government provided agricultural technology from 1995-98 (CENTA, 2000). This is a low figure if one compares this figure with the IDB/IICA estimated proportion of the agriculture EAP for that country, which is 26 percent.

Information from other countries, however, suggests that extension provided to women may be in line with their participation levels in the sector. In Nicaragua, for example, the proportion of female beneficiaries increased from 16 to 26 percent, the latter being close to the IDB/IICA estimated female proportion of the agriculture EAP (28 percent). Official data indicate that women had greater access to the "massive" technical assistance, which is provided for free to small farmers by government agency extension workers, than the paid services. In Ecuador, 35 percent of those who received agricultural extension through the Bank-financed PRONADER Project were women, a project that had as an explicit objective to increase women's participation in rural development. In Venezuela, between 30-35 percent of the Bank-financed Agricultural Extension Project (PREA), which finances private extension services, were women. Based on IDB/IICA data compiled from throughout the region, Kleysen (1996) indicates that Barbados is the country with the largest proportion of women having received training and technical assistance, followed by Colombia and Venezuela.⁵¹

Box A5.2: Progressing on Gender Equality in Land Titling in Colombia

Since 1988, under Agrarian Law 30, agrarian reform adjudications and titles have been required to be made in the name of couples (joint titling) who are either legally married or together in consensual unions (ibid.). Special provisions were also made for female household heads with regard to priority access to national lands and inclusion in agrarian reform communal enterprises, and peasant women's organizations were for the first time granted participation in regional and national agrarian reform committees. However, despite these gender progressive policy measures, evidence suggests that resistance from both local Instituto Nacional Colombiano de Reforma Agraria (INCORA) authorities and some male dominated national peasant organizations limited their implementation (ibid.). More meaningful change began in 1994, after Colombia's civil code was reformed to fully recognize the rights of consensual unions; INCORA added women displaced by social violence to their roster of priority beneficiaries; and Agrarian Law 160 reaffirmed mandatory joint titling under all agrarian reform programs.

Equally as important for gender outcomes, the agrarian reform process itself was significantly overhauled in 1994, establishing a fund for land purchase grants which was administered in a much more decentralized way than had previously been the case (Deininger 1999). Under the new system, which has proceeded on the two parallel tracts of direct government purchase and a "market assisted" pilot program, potential beneficiaries are awarded "points" based on their level of education, agricultural experience, other income sources, and access to government services. All else equal, female household heads and displaced women are to be given priority in the allocation of land. In addition, in all of the pilot *municipios*, alternative programs have been initiated to address the needs of those who do not qualify for land, such as chicken hatcheries and other microenterprises for female household heads (ibid.).

Impressively, out of more than 17,000 beneficiaries during the first four years of land adjudication under Agrarian Law 160, 57 percent were couples receiving joint titles to newly acquired land, and another 13 percent were women receiving individual titles. The record is even better for the market assisted pilot program, which allocated 68 percent of farms to couples and 12 percent to women. For the years where plot size is available, it appears that individual women beneficiaries are receiving as much or even slightly more land on average than individual men and couples. This record speaks extremely well of Colombia's efforts to achieve gender parity in the redistribution of this critical economic resource.

Alongside these innovative agrarian reform efforts, in 1995, the Colombian government, with support from the IDB, launched a new land titling program, the Programa Presidencial para la Formalización de la Propiedad y Modernización de la Titulación Predial, commonly known as "Titular." Initial results from this program, which has focused on the regularization of squatters' rights on national lands, indicates that 20-25 percent of properties were jointly titled during the first two years (see Table 5.6). An even greater proportion – thirty percent – were titled to women individually, evidence that INCORA has been complying with its mandate to give priority to "unprotected" women who have been displaced by the violence (Deere and León 2000). While, the average size of plots titled to women was somewhat smaller than those titled to men, jointly titled farms were significantly larger than individually titled farms.

Source: World Bank, forthcoming.

Among Bank-financed projects in the Region, it is now common for agricultural technology programs to have components or activities to reach women farmers (e.g. Ecuador Rural Development Project, Argentina Small Farmers Project, El Salvador PRISA, Honduras PAAR, Nicaragua ATLT Project, Venezuela Agricultural Extension Project, to mention a few). The quality of the extension services provided to women, however, may be an issue. A recent Bank report on gender in PREA in Venezuela, indicates that extension for women tends to be in the traditional female areas that have limited market viability and is provided by non technical *demonstradoras del hogar* (Meza, 2000). In the dry and poor Northeast of Brazil, a rural development project is supporting cooperatives that commercialize traditional feminine crafts which according to a consultant's report are marginal at best and do not provide women a way out of poverty (Benería, 1999).

Other supply-side limitations to women's participation in agriculture extension include the following. First, extension systems tend to focus on single crops (which are produced by men) rather than the broad spectrum of women's crops. Second, extension agents tend to be overloaded and underpaid which means that they are likely to target those groups that are easier to organize and more vocal in their demands (i.e. men) rather than identifying the potential or latent demand of different groups and tailoring services according to their characteristics. Third, extension workers tend to favor land owners (who are more often men) (Agarwal, 1994) or household heads who is

perceived to be or are identified to be male. Fourth, agricultural technology tends to be inefficiently transferred between household members (Saito and Spurling, 1992). Fifth, extension programs tend to target women in isolation, thereby causing possible suspicion and mistrust among husbands and other members of the community and may conflict with local custom in indigenous areas. In Ecuador, after problems arising from organizing women's-only groups, PRONADER began to integrate women into mixed groups, which according to project staff was much more effective.

On the demand-side, experience from extension projects in countries such as Argentina, Venezuela and Ecuador indicate that women's time and mobility tends to be constrained by their dual domestic-productive roles. Women tend to be more home-bound and have fewer social interactions thus limiting their access to information. They become functionally illiterate to a greater extent than men because they have less social exposure. In addition, they have more limited mobility given that they often need the permission of their husbands to organize and participate in agricultural extension and training activities. Experiences from World Bank and other projects suggests that these obstacles can be overcome by integrating men into gender-related projects and understanding the underlying causes of men's actions and behavior, which like women's are dictated by gender norms. For example, project staff of FASBASE, a health and nutrition project, in Ecuador learned that rural men opposed their wives participation in projects because they were being ridiculed or ostracized by their male peers in the community; the project subsequently began to involve the men themselves. In the El Salvador PRISA project, men began to support their wives farming activities after extension agents made a concerted effort to include them.

Rural Financial Markets

While men and women both lack access to formal credit, the literature points to greater constraints for women. For example, collateral requirements (usually land) and transaction costs—transportation costs, paperwork, time spent waiting—tend to limit women more than men, as does the nature of women's productive activities and micro-enterprises, the latter tending to be smaller and less productive. Women's lower functional literacy combined with their lower social mobility and lack of familiarity with loan procedures may constrain their interaction with banks and moneylenders.

Country-specific information from the region, however, suggests that vis-à-vis men, women may have greater access to informal sources of credit. Data from the Guarantee Fund for Small Enterprises in El Salvador from September of 1994, indicates that 55 percent of those receiving credit were men and 45 percent were women (World Bank, 1996a). An informal finance survey suggests larger gender gaps in rural El Salvador – seven percent of female respondents of the survey and 12 percent of the male respondents claimed having received formal credit (ibid.). Both men and women received informal credit, however, and in some cases women were favored. The same finance survey indicates that 56 percent of rural female respondents and 54 percent of rural male respondents received an informal loan over the previous 10 year period (ibid.). Some of the more well established NGOs showed a preference for female borrowers, with participation cited as 65 to 80 percent depending on the NGO (ibid.). Similarly, in Nicaragua according to a FIDEG study, men received almost the same proportion of loans (men 51 percent and women 49 percent) (World Bank, 1997b). Men were favored slightly in terms of formal credit, receiving 54 percent of all loans and both men and women received almost equal numbers of informal loans (ibid).

Based on IDB/IICA data collected throughout the region, Kleysen (1998) concludes that for all countries with the exception of Venezuela, rural women had better access to private sources of credit, NGOs, community banks, and other mechanisms, than to state Banks. Kleysen also notes demand for credit among women is another constraint. In only four of the 18 countries examined in the IDB/IICA survey did women account for more than 35 percent of those who had applied for credit. In Bolivia and Peru the proportion was only six percent, due most likely to lower levels of education and language constraints among indigenous women.

The Reproductive Sphere

Rural women have higher fertility rates than their urban counterparts, the difference being more than two children in most countries (see **Table A5.7**). For women, this means less time to spend on productive activities; for men more dependents means increased pressure cover family expenses and survival strategies such as migration. Fertility in urban areas ranges from a low of 2.1 in Uruguay to 4.3 in Bolivia. In rural areas, fertility levels range from a low of 2.8 (also in Uruguay) to a high of 7.0 in Honduras. The biggest urban rural differences are in Peru, Honduras and Mexico and the smallest are in Uruguay, Chile and Costa Rica. To some extent the gap is due to less access to

family planning. For example, only 60 percent of women in Ecuador say they have heard of or seen family planning messages. However, this proportion declines to 54 percent for women living in rural areas. The problem of access to family planning and its link to productivity is true even in a country as developed as Argentina, where reportedly access to family planning is more of a constraint for the rural population (Correia, 1999). Potential female beneficiaries of the Argentina Rural Farmers Project reported to the Task Manager that before they could think about improving their productivity, they needed to control their fertility.

Table A5.7 Differences in Rural/Urban Global Fertility Rates, Last Available Year (Children per Woman)

<i>Country</i>	<i>Year</i>	<i>Urban</i>	<i>Rural</i>	<i>Total</i>	<i>Urban-Rural Difference</i>
Bolivia	1992	4.2	6.3	5.0	2.1
Brazil	1991	2.8	5.2	3.7	2.4
Colombia	1990	2.5	3.8	2.9	1.3
Costa Rica	1985	3.0	4.1	-	1.1
Chile	1992	2.3	3.1	2.4	0.8
Dominican Rep.	1991	2.8	4.4	3.3	1.6
Ecuador	1987	3.5	5.5	4.3	2.0
El Salvador	1985	3.3	5.9	4.4	2.6
Guatemala	1987	4.1	6.5	5.6	2.4
Honduras	1988	4.1	7.0	5.5	2.9
Mexico	1987	3.0	5.9	4.0	2.9
Nicaragua	1992	3.6	6.4	-	2.8
Panama	1976	3.2	5.4	4.1	2.2
Paraguay	1990	3.6	6.1	4.7	2.5
Peru	1992	2.8	6.2	3.5	3.4
Uruguay	1985	2.1	2.8	2.5	0.7
Venezuela	1977-81	3.7	6.1	4.3	2.4

Source: FLACSO, 1995

Education

While the gender gap in education has been closing throughout the region, illiteracy tends to be greater among rural women than men although regional variations exist. And rural indigenous women tend to be more monolingual than indigenous men. For example in Ecuador, national illiteracy rates are 12 and eight percent for women and men respectively according to LSMS-98 data, and substantially higher in rural areas (21 percent for women and 15 percent for men). In terms of regional differences in Ecuador, the largest gaps are in the Sierra region where more than a quarter of women do not know how to read or write compared to 14 percent for men. In the Costa region, men – who have one of the highest illiteracy rates in the country – are at a disadvantage compared to women in both urban and rural areas. Gender gaps in functional illiteracy are smaller. Amongst the indigenous, 65 percent of women are functionally illiterate compared to 52 percent of men. While indigenous populations are more likely to be uneducated generally, indigenous women in particular are at a disadvantage in most countries. In the case of Ecuador, 53 percent of indigenous women are illiterate compared to 35 percent of men. In Guatemala, indigenous men have an average of 1.9 years of schooling, double the average of 0.9 year for indigenous women. In indigenous areas of Panama, less than two thirds of those over age nine can read and write but illiteracy is particularly high among indigenous women.

Rural Violence

Using homicide rates as the measure, Latin America and the Caribbean is the most violent region in the World (World Bank, 1997a). At 150 per 100,000 inhabitants, El Salvador and Guatemala have the highest homicide rates in the Region (see table A5.8). In Colombia the corresponding rate was 89.5 in the late 80s and early 90s. Throughout the Americas, homicide rates are highest among young men aged 15-24 (PAHO, 1993, cited in Barker, 1998). Most violence is perpetuated by young males against other young men (World Bank, 1997, Pollack, 1998) and involves labor conflicts, crime, and street and gang violence (van Bronkhorst, 1999). As was previously discussed, mortality rates linked to external factors – including traffic accidents, homicide and suicide – vary by gender. In El Salvador, for example, among homicide victims over age 15, male death rates (200 per 100,000 inhabitants) are ten times those of females (Cruz, 1999). This is consistent with trends in the rest of the region: in Latin America, North America and the Caribbean, young men's mortality rates range from two to seven times higher than young women's (Barker, 1998). While women are also victims of crime, they are more likely to experience domestic and sexual aggression (van Bronkhorst, 1999) and their injuries are less likely to result in death.

In addition to young males, violence is associated with lower socio-economic levels, unemployment or underemployment, lower education, and alcohol and drug abuse (Morrison and Loreto Biehl, 1999). Moreover, having experienced or witnessed chronic abuse as a child, significantly increases the likelihood of being violent as an adult (Huesmann et al., 1984, cited in Morrison and Loreto Biehl, 1999). Traditional stereotypes – transmitted through school, the popular media, and the home – reinforce aggression, physical prowess, and risk taking among boys and sociability and relationship building among girls.

Actions related to violence, both economic and social violence – which includes domestic aggression – should focus on prevention. According to Morrison and Loreto Biehl (1999), experience has demonstrated that the education system, community level programs, and the media are important vehicles for addressing and reducing the incidence of violence. For example, the education system has the potential to modify cultural values that promote violent behavior. Possible actions include: (a) retraining teachers to ensure they do not promote violent behavior among boys and submission among girls; (b) eliminating gender stereotypes in textbooks and other pedagogical materials; and (c) developing innovative programs to teach children nonviolent resolution skills and promote civic values. Schools are also an ideal vehicle for identifying at-risk children and families who need special attention. Community level programs can be used to provide informal education programs, teach citizens about legal sanctions against violence, establish violence prevention strategies, and provide social services for victims of violence. And lastly, media can be used to promote nonviolence and counteract the media's role in reinforcing violence. Mass media education campaigns represent a potentially effective response by providing nonviolent role models and by promoting nonviolent responses. Radio and television are being used in war torn areas such as Barundi and the Baltics to produce and disseminate positive images of interpersonal interactions (male-female and adult-child) and promote *convivencia*. These could be applicable to violent countries such as Colombia, El Salvador, and Guatemala. In terms of sanctioning violence, ensuring that men and women are aware of laws on violence and that women have access to legal services are other important measures to addressing violence, and domestic violence in particular.

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Table A5.8: Homicide Rates per 100,000 Population in Latin America and the Caribbean

Country	Late 80s/Early 90s
El Salvador	150.0
Guatemala	150.0
Colombia	89.5
Jamaica	35.0
Brazil	19.7
Nicaragua	17.8

Sources: PAHO, 1997, cited in World Bank 1997a

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Appendix 6 Latin America and the Caribbean Region Farming Systems Study

Introduction: Major Farming Systems in Latin America & the Caribbean

This is an extract of the December 2000 FAO Farming Systems Study.⁵² It characterises fifteen farming systems, their agronomic potential and drawbacks, their contribution to the livelihood and economy of the region, their poverty profile and the major issues that need to be addressed to reduce poverty in these systems. It amply shows the rich natural resource endowment of the region, and its great diversity. It concludes with key priorities for consideration to reduce rural poverty extensive in selected farming systems.

Characteristics of the Region

Stretching from latitude 29° North on the Mexican border to 56° South at the tip of Tierra del Fuego, Latin America and the Caribbean (LAC – as defined by the World Bank) covers some 20.5 million km² and encompasses 42 countries with a total estimated population in 2000 of 519 million⁵³.

The size of the region, and its enormous variation in ecological conditions, combined with its relatively low population density (25 persons/km²) and high rates of urbanisation (75%) have permitted the development and preservation of an extremely high level of biodiversity. According to UNEP⁵⁴, 5 of the 10 richest countries in the world in terms of biodiversity are in LAC, and the region contains 40% of the plant and animal species of the world's tropical forests and 36% of the main cultivated food and industrial species. The largest unfragmented tropical forest in the world is found in the Amazon basin, and overall, the region possesses 28% of the world's forest area – 10m km² in 1994.

LAC possessed some 160m ha of agricultural land⁵⁵ in 1999, comprising 14% of the developing world total – an increase of 47% since 1961, but still only 18% of the estimated potential for the region⁵⁶. An estimated 18.3m ha of this area is under irrigation. There is a further 600m ha in grazing and pastureland. Part of this abundance stems from the region's relatively favourable agro-ecological conditions; 40% of the developing world's humid areas are to be found in LAC, in contrast to only 4.2% of the arid and semi-arid lands. Humid and sub-humid lands account for over 90% of the LAC land area. This abundance is further demonstrated when water resources are considered. LAC accounts for 48% of the total renewable water resources in the developing world. Based upon irrigated area and water use efficiency, it is estimated that no more than 1% of the available water in LAC is currently utilised⁵⁷, serving an estimated 18.2m ha of irrigated land within the region in 1999.

More than moisture is needed to ensure agricultural productivity, and there are severe soil limitations associated with many humid tropical regions.⁵⁸ In addition, the extensive mountain and slope lands found within the region (almost 2 million km², or less than 10% of the total land area) estimated to have a slopes of 30% or more) limit agricultural activity or result in increased risks of erosion, while the poor management of arid and semi-arid soils can also have devastating effects.⁵⁹ A 1988 study by FAO estimated that only 3.4% of all lands in LAC were without any significant restrictions for agricultural use.⁶⁰

Despite a relatively low cropping intensity of only 64%, LAC is globally important in a number of crops, and for these crops often achieves yields significantly above the developing world average (Table A6.1 below).⁶¹

With an average per capita GNP of US \$3,940 in 1998, LAC is the wealthiest of the developing regions of the world, and also the least dependent on agriculture; only 8% of GDP in 1998, and as growth in agricultural value added (averaging 2.6% per annum in the period 1990-98) is lower than for industry or services, that share is likely to continue declining. Furthermore, FAO nutritional data indicates that the average LAC diet contains 2791 calories, 6% higher than the average for all developing countries and 120% of the required minimum daily allowance⁶². The ECLAC per capita food index rose by 15% from 1980-97⁶³.

Table A6.1 Comparative Performance and Importance of LAC Crop Production

<i>Crop</i>	<i>Area</i>		<i>Yield</i>		<i>Production</i>	
	<i>LAC (000 ha)</i>	<i>% of ADC</i>	<i>LAC (t/ha)</i>	<i>% of ADC</i>	<i>LAC (t 000)</i>	<i>% of ADC</i>
Maize	29,083	30	2.5	96	73,972	29
Rice	5,618	23	3.2	126	18,109	30
Wheat	8,661	8	2.4	92	20,464	7
Sugar Cane	8,403	46	62.8	104	527,860	47
Banana	1,205	33	19.7	132	23,771	43
Citrus	1,999	27	17.4	198	34,734	52
Soybean	18,941	51	2.2	129	40,810	64
Sunflower	3,312	43	1.8	138	5,876	59
Cacao	1,583	26	0.4	80	592	21
Coffee	5,603	53	0.6	120	3,380	58

ADC: All developing countries. Source: FAOSTAT, 1998.

Nevertheless, serious problems of equity exist. Not only do the wealthy control one of the highest proportions of resources of any region in the world⁶⁴, but there is also a strong urban bias. According to 1997 estimates by CEPAL⁶⁵, 54% of rural households in the region were classified as poor, against only 30% from urban areas. Extreme poverty affected 31% of rural households but only 10% of urban ones. In total 47 million rural inhabitants were classified as in extreme poverty, and 78.2 million as in poverty.

Internationally comparable poverty data are still largely unavailable, but vary extensively for those countries studied within the region – from less than 2% of the population with an income of under US\$1/day in Uruguay (1989 data), to 40% in Guatemala and Honduras⁶⁶. Equity problems are particularly evident in respect of land distribution, with LAC historically possessing some of the highest GINI (inequity) coefficients in the world, reaching over 0.9 in Peru, Paraguay and Venezuela and close to those levels in Colombia and Brazil.⁶⁷ Only pre-reform Eastern Europe had higher levels as a result of state ownership of land.

In the period 1995-97, LAC had an annual net trade deficit in cereals of 16m tonnes, equivalent to a self-sufficiency ratio of 90%. LAC also has a net deficit in dairy products of 6.3 m tonnes per year, but it is the only region in the developing world with a trade surplus in livestock products; 0.9m t/annum in this period, in comparison with an overall developing world deficit of 0.4m t.

Major Regional Farming Systems

Due to its enormous latitudinal range, varied topography, and rich biodiversity, Latin America and the Caribbean has the most diverse and complex range of farming systems of any region in the world.⁶⁸ Fifteen major systems have been defined for the purposes of this study, divided into four principal agro-ecological categories. Several of these systems have clearly identifiable, although not geographically separate, sub-systems. Even this number, however, could easily be expanded: in the Andean cordillera alone, at least 6 separate systems could be defined. The 15 major farming systems are described and characterised in **Appendix 6.1** and presented graphically in the opening Map.

Dispersed Tropical Forest System – Centred on the Amazonian basin and covering approximately 6m km² or 30% of the total land area of LAC, this system comprises scattered indigenous and low-input settler agricultural activity, interspersed with extensive beef and occasional plantation farming, especially towards the margin of the area. Cultivated area is well under 5% with negligible irrigation. Population density is very low; around 3 person/km².

Coastal Tropical Export Plantation System – This system covers 1.85 million km², and has an estimated agricultural population of 21 million. There are an estimated 18m ha of cultivated land of which 15% is irrigated. It occupies some of the richest agricultural lands in the region, but also includes mangrove swamps and isolated areas of tropical forest. It contains two major sub-systems: (a) small-scale family farms in coastal areas with mixed agriculture, in-shore fishing and frequent off-farm employment (e.g. tourism); and (b) export oriented commercial plantations, often internationally owned, with intensive large-scale production and significant poverty among labourers.

Intensive Mixed Tropical System – Centred on East-Central Brazil, this intensive mixed agricultural system represents the heartland of Brazilian agriculture, and occupies an estimated 0.82m km² with an agricultural population of some 11 million inhabitants. There are some 10m ha of cultivated land, of about 10% is irrigated. Coffee, horticulture and fruit are important products. Poverty levels are relatively low in this system.

“Campos” Tropical Moist Savanna System – The Campos represent a gradation in moisture and often soil quality from the intensive system described above. Covering just over 1m km² in S. Brazil and N. Uruguay, the system has an estimated rural population of about 4 million, and is strongly oriented to livestock and rice production. There are an estimated 12m ha of cultivated land, of which just under 20% is irrigated. Poverty is low to moderate.

Frontier Tropical Savanna System – Covering the enormous Cerrados area of Central Western Brazil and the Llanos of E. Colombia, Venezuela and Guyana, this system encompasses 2.3m km² and an agricultural population of approximately 7m. There are an estimated 25m ha of cultivated land, about 8% of which is irrigated. Only recently being intensively developed, this frontier system offers enormous potential for future agricultural growth in livestock, cereals and soya among other crops. Poverty is relatively low to moderate for immigrants.

Mediterranean and Temperate Mixed System – Although it covers a relatively small area, 0.33m km², this system accounts for a significant proportion of the commercial agriculture in Chile and is also important in Argentina. Cultivated area is 2.8m ha, of which more than 20% is irrigated. The rural population in this system is estimated at 3-4 million. Wheat, olives, horticulture, fruits and livestock are all important. Poverty is generally low.

Pampas Temperate Grasslands System – Covering some 1.1m km² in Central and Eastern Argentina and Uruguay, this low population zone (of some 1 million rural inhabitants) was originally largely devoted to livestock and later, wheat, for export. More recently, soybean and sunflower have made important gains. There are now estimated to be 14m ha of cultivation, but only about 5% is irrigated. Further intensification is expected. Poverty is low.

“Gran Chaco” Frontier Tropical Drylands System – Stretching from North-Central Argentina, through Paraguay and into Eastern Bolivia, this system of 0.7 million km² has only recently been economically developed and still has a rural population of less than 1 million. Total cultivated area is estimated at less than 7m ha, and only just over 1% is irrigated. Unlike the Cerrados and Llanos areas, however, the growth potential of the Gran Chaco is severely limited by soils and moisture. Significant poverty is found among the small colonists.

Established Tropical Drylands System – Due to its location near the coast of North East Brazil and in the Yucatan peninsula of Mexico, this large system of 1.3 million km² has a well established economic and productive structure, but faces many of the same agro-ecological limitations as the Gran Chaco. The almost 14m ha of cultivated land has less than 5% irrigation. It is a system with severe and chronic poverty among small-scale producers, mixed with large-scale extensive ranches. Land degradation is a serious problem for the 12-13m agricultural population.

Dry Cool Temperate Grassland System – As the Pampas extend southwards, they become drier and cooler, merging eventually into the very sparsely populated plains of Patagonia (approximately 0.25m agricultural population), covering some 0.6 million km², where sheep and cattle ranching is the only widespread agricultural activity. Cultivated area is less than 5% of total, and there is no reported irrigation in the system. Poverty is low to moderate.

Dispersed Irrigation-Based Arid Mixed System – This farming system is the most fragmented geographically within the region covering 1.65 million km², principally across Northern and Central Mexico and coastal and inland valley areas of Peru and Chile. The 6.5m ha of cultivate land is more than 80% irrigated, allowing intensification of production, generally commercially oriented, and supporting an agricultural population of over 12 million.

Mesoamerican Hillside Maize & Beans System – Stretching from Central Mexico to the Panama Canal (0.65m km²) and with an estimated agricultural population of about 17 million – with a substantial indigenous component - this system is culturally based upon the production of maize and beans for subsistence. Although there are more than 2.4m ha of irrigation within the system, the historical loss of better valley lands has led to widespread and severe poverty and serious land degradation in many areas.

Northern Andean Highlands Mixed System – Covering 0.43 million km² and with an agricultural population of 11 million, this system contains two distinct sub-systems, generally differentiated by altitude: (a) the well developed intermontane valleys and lower slopes – the heart of Andean coffee production; and (b) the highlands and upper valleys where temperate crops, maize and pigs predominate and where the traditional indigenous culture is strongly established. Poverty is generally moderate in the lower areas, but severe at higher altitudes.

Central Andean High Altitude and Altiplano System – Again divided into two distinct sub-systems, the Central Andean system covers 1.1 million km² and a total agricultural population of 7 million. Through most of Peru, the system occupies the steep valleys of the high Sierra. From Southern Peru into Northern Chile and Argentina, the altiplano is the predominant landform. Throughout the zone the key characteristics are production at an altitude of more than 3,200m. and a very strong indigenous culture. The temperate crops of the Northern Andes are present but sheep and camelidae are also very important. There is approximately 1.2m ha of irrigated land. Poverty is very severe in this system.

Southern Andes Cool Temperate Livestock and Forestry System – At the Southern end of the Andes, lower temperatures combined with continued high altitudes render cultivation generally sub-marginal. The rural population of less than 1 million are largely dependent upon livestock grazing, forestry and tourism for income over the 0.55 million km² area. Poverty, is low to moderate, reflecting the low population densities.

Table A6.2: Key Poverty Related Characteristics of Farming Systems in Latin America & the Caribbean

<i>Farming Systems</i>	<i>Land area (% of region)</i>	<i>Rural population (% of region)</i>	<i>Poverty</i>	<i>Potential for poverty reduction</i>	<i>Potential for agricultural growth</i>
Dispersed Tropical Forest Production	32-33	3	Low/Moderate	Moderate	Moderate/High
Lowland & Coastal Tropical Production	8-9	21	Low/Severe (highly variable) ¹	Moderate	Moderate
Intensive Mixed Tropical	3-4	12	Low (except labourers)	Low	Moderate
Campos Tropical Moist Savannah	3-4	3	Low/Moderate	Moderate	Moderate/High
Frontier Tropical Savannah	12-13	6	Low/Moderate (esp. smallholders)	Low (within system) ²	High
Mediterranean & Temperate Mixed	1-2	3	Low	Low	Low
Pampas Temperate Grassland	5-6	1	Low	Low	Moderate
Gran Chaco frontier Drylands	3-4	<1	Moderate	Low/Moderate	Moderate
Establish Marginal Tropical Drylands	6-7	11	Severe/Very Severe (esp. during drought)	Moderate	Low
Dry Cool Temperate Grassland	3	<1	Low	Low	Low
Dispersed Irrigation-Based Arid Mixed	8	12	Low/Moderate	Low	Moderate
Mesoamerican Hillside Maize-Beans	3	16	Severe/Very Severe	Moderate/High	Low/Moderate
Northern Andean Highlands Mixed Production	2-3	10	Low/Severe (esp. higher altitudes) ³	Moderate/High	Moderate
Central Andean Altiplano & High Altitude	4	5	Severe/Very Severe	Moderate	Low
Southern Andes Cool Temperate Livestock & Forestry	3	<1	Low	Low	Low

Regional Priority Systems

Four of the systems distinguished above have been selected for more detailed analysis, using selection criteria based upon poverty and growth potential, as summarized in **Table A6.2** below.

The selected systems, which are discussed in subsequent sections of this document are:

- Using primarily poverty criteria (severe poverty and significant populations)
- Established Marginal Tropical Drylands System
- Mesoamerican Hillside Maize and Beans System
- Central Andean Altiplano and High Altitude System
- Using primarily growth criteria (major potential for expansion of production)

Frontier Tropical Savanna System

The poverty-related characteristics of the farming systems are set out in **Table A6.2**. The farming systems are set out in **Table A6.3**.

Table A6.3 Key Characteristics and Potentials of Farming Systems in Latin America & the Caribbean

<i>Farming System</i>	<i>Area</i>		<i>Principal Livelihoods²</i>	<i>Incidence of Poverty</i>	<i>Potential for</i>	
	<i>(% of total)</i>	<i>Agricultural Population/l</i>			<i>Poverty Reduction</i>	<i>Growth</i>
Dispersed Tropical Forest	30	3	subsistence/cattle ranching	Low/Moderate	Moderate	Moderate/High
Coastal Tropical Export Plantation	9	20	export crops/ tree crops, fishing, tubers, tourism	Low/Severe (highly variable)	Moderate	Moderate
Intensive Mixed Tropical	4	10	coffee, horticulture, fruit	Low (except labourers)	Low	Moderate
Campos Tropical Moist Savanna	5	3	rice & livestock	Low/Moderate	Moderate	Moderate/High
Frontier Tropical Savanna	11	6	livestock, oilseeds, grains, some coffee	Low/Moderate (smallholders)	Low (in system)/3	High
Mediterranean & Temperate Mixed	2	3	wheat, olives, horticulture, fruit	Low	Low	Low
Pampas Temperate Grassland	5	1	livestock, wheat, soybean	Low	Low	Moderate
Gran Chaco Frontier Tropical Drylands	3	<1	livestock, cotton, subsistence crops	Moderate	Low/Moderate	Moderate
Established Tropical Drylands	6	11	livestock, maize, cassava, labour	Severe/Very Severe(drought)	Moderate	Low
Dry Cool Temperate Grassland	3	<0.25	sheep, cattle	Low/Moderate	Low	Low
Dispersed Irrigation-Based Arid Mixed	8	11	horticulture, fruit, cattle	Low/Moderate	Low	Moderate
Mesoamerican Hillside Maize-Beans	3	17	maize, beans, coffee, horticulture	Severe/Very Severe	Moderate/High	Low/Moderate
Northern Andean Highlands Mixed	2	9	vegetables, maize + coffee, cattle / pigs,	Low/Severe (highly variable)	Moderate/High	Moderate

Table A6.3 Key Characteristics and Potentials of Farming Systems in Latin America & the Caribbean

<i>Farming System</i>	<i>Area</i>		<i>Principal Livelihoods</i> ²	<i>Incidence of Poverty</i>	<i>Potential for</i>	
	<i>(% of total)</i>	<i>Agricultural Population/1</i>			<i>Poverty Reduction</i>	<i>Growth</i>
			cereals, potatoes			
Central Andean High Altitude & Altiplano	5	6	tubers, sheep, grains, llamas, vegetables	Severe/Very Severe	Moderate	Low
Southern Andes Cool Temperate	3	<1	sheep, cattle, forest extraction, tourism	Low/Moderate	Low	Low

Selected priority systems are in bold type.

1/ Agricultural populations are defined as those working in farming, forestry or fishing and their dependants

2/ A slash (/) in the livelihoods column indicates distinct sub-systems.

3/ The Frontier Tropical Savanna farming system may have considerable potential for poverty reduction for immigrants from other high-poverty systems.

Region-Wide Trends

The following section summarises regional trends and issues with particular reference to the position of LAC vis-a-vis all other developing countries. Unless otherwise stated, historical data is taken from the FAOSTAT statistical system, while future projections are largely extracted from the technical interim report "Agriculture: Towards 2015/30" issued by FAO in April 2000. The projections largely assume a continuation of present trends, which have been modified where physical or other limitations clearly are present. Unanticipated major changes in existing trends with respect to globalisation, climate or technology availability could render the AT2030 projections incorrect, but this risk must always be present when discussing periods 30 years into the future.

A listing of some key quantitative trends is followed by a review of specific issues affecting LAC farming systems in the areas of: (a) Natural Resources and Climate; (b) Science and Technology; (c) Globalisation and Markets; (d) Policies, Institutions and Public Goods; and (e) Information and Human Capital.

In the last 20 years agricultural production in LAC has grown at 2.8% annually, in line with demand for agricultural products. However, due to the slowdown in total population growth, rapid urbanisation and a relatively low income elasticity of demand, the growth in demand for food and raw materials has been declining more recently and for the next 30 years it is estimated at about 2.4% p.a.⁶⁹. The way in which LAC will respond to this changing demand will depend not only on the underlying natural resource potentials for agricultural production and economic development but also on the socio-economic evolution of the region.

Population

During 2000-2030, LAC population is estimated to increase 40 % to 725m⁷⁰. This is lower than the overall 47% rate projected for developing countries but higher, for example, than East Asia. In fact, the rate of regional population growth has declined dramatically in the last 40 years, from 2.8% p.a. in the 1960s to about 1.55% in the 1990s.

The proportion of population living in rural areas⁷¹ will decline to 17% over the next 30 years. Given the overall rate of population growth, this will leave the rural population at regional level only marginally lower than at present (from 128 to 121m), but significant sub-regional differences are anticipated. The poorer countries are expected to maintain high rates of overall population growth, resulting in an absolute increase in rural populations. Thus Central America, Bolivia, Paraguay and Haiti will see increased rural populations, while Peru, Colombia, Mexico and Panama will see only very marginal declines. On the other hand, countries such as Argentina and Brazil will experience declines in rural population of 20% or more. In general, those countries with overall population increases of 50% or more will see rural populations increase.

Nutrition

During 2000-2030, the average LAC per capita daily nutrient intake is expected to increase by 10 % to 3,080 calories. This is a marginally slower rate of increase than for all developing countries, but will still leave LAC above the developing world average in 2030. The increase in calorie intake in LAC is expected to derive principally from meat and vegetable oils (33% each), dairy (18 %) and cereals (7 %). Roots and tuber consumption is expected to decline. For all developing countries, the expected calorie increases from meat, vegetable oils and dairy exceed 50% for each category, sugar by 25%, roots and tubers by 13%, and cereals by 3.4%.

The overall number of people suffering from under-nourishment (as defined by the UN), currently estimated at 53 million, will decline to 32m by 2030. This represents a drop from 11% of the population to 5%.

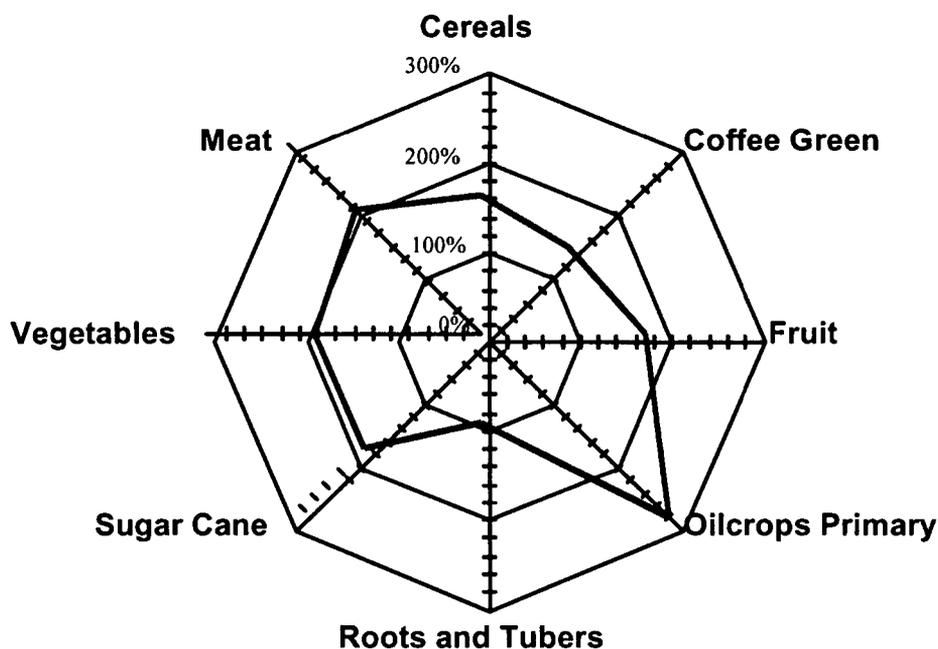
Land Cover

Forest: At the end of the 1980s, the deforestation rate in LAC was estimated at 7.4 million ha per year, equivalent to 0.8% annually⁷². This rate appeared to decline in South America, to 0.5% per annum, over the period 1990-95, but accelerated in Central America, to 1.3% per annum. The 9 million km² of total forest area reported regionally in 1999 was accounted for by tropical forest (75%), non-tropical forest (6.5%), sparse trees and parkland (18%) and mangroves (0.5%)⁷³.

Pasture: Over the 10 year period 1982/84-1992/94 the area of LAC under pasture and grazing land increased by 3% in South America and 6.2% in Central America to reach 600m ha. According to World Resource Institute data, pasture lands in Guatemala increased by an astonishing 65% (albeit from a small base) to 2.6 million ha. A smaller, but still impressive 27.6% increase in Paraguay resulted in 21.7 million ha of pasture.

Arable land: Historically, LAC arable land in use expanded by 47 % since 1961, but cropping intensity increased only 1 % during this period. During 2000-2030 arable land in use is estimated by the FAO 2030 study to expand 20 % (global expansion is estimated at 12 %), while cropping intensity will increase by 11% over the same period, to 71%. However, the 30 year forecast increase of 0.55 % p.a. in arable area is only one third of the 40-year historical trend of 1.76 % annually. The slowdown in expansion in LAC is steeper than in other regions of the world (0.34 % p.a. projected, half of the 0.68 % p.a. rate since 1961). This projection may be too low, given the areas being opened up in the Cerrados, Llanos, Chaco and Amazon basin.

Changes in Structure of Agricultural Production Latin America and Carebbean Regions: 1970-1995



Water Use and Irrigation

During 2000-2030, the proportion of arable land in LAC which is irrigated is expected to remain constant in relative terms at 11.5% (but reach 22m ha in absolute terms), whereas in all developing countries the irrigated area is expanding faster than rainfed area, to an estimated 29 % of arable land by 2030. Recently, irrigation efficiency in LAC has been estimated at 26 % compared with 43 % in all developing countries. During the period 2000-2030, only minor increases in water use and efficiency are expected in LAC in contrast to other developing countries, where efficiency will reach 50% in 2030.

Fertiliser

During the past decade, fertiliser consumption in LAC has expanded at 2.1 % p.a. compared with 3.5 % for the developing world as a whole. In the period 2000-2030, this pattern will be reversed; growth in fertiliser consumption in LAC is estimated to slow to 1.6 % p.a., but to decline to only 1.1 % for all developing countries. However, due to the expansion of arable area (see above) average fertiliser use per hectare in LAC will increase at about 1 % p.a., the same rate as for all developing countries.

Crop Production and Yields

Overall crop production growth to 2030 is projected at 1.7 % p.a. in LAC (1.6 % p.a. in all developing countries). Greater increases in arable land within LAC are offset by slower increases in cropping intensity (11% increase to 2030 compared with 22 % for all developing countries). Historically (1961-1997), average crop yields have increased in total by 52 % in LAC compared with 72 % in all developing countries, while during 2000-2030 average crop yields in LAC are forecast to increase by a further 48%, compared with 69 % for all developing countries. This lag in yield increases reflects the greater expansion in arable area in LAC compared with other regions.

Forecasts for individual crops are presented in **Appendix A6.2**, but some of the key categories are briefly summarised below:

- **Maize:** LAC accounts for about 28% of developing world production of maize. Yields grew from 1.6 t/ha in 1970 to 2.5 t/ha in 1996 (developing country average of 2.6 t/ha.). By 2030 planted area will increase by 30% to 38m hectares, yield by 36% to 3.4 t/ha and overall production by 77% to 131m tons. These are slower increases than in other developing countries.
- **Coffee:** LAC produces about 58 % of the developing countries green coffee production with average yields equal to that of all developing countries. By 2030 planted area will increase by 31% to 7.4m ha., yields by 50% to 0.9 t/ha and overall production by 87% to 6.3m tons. These increases are marginally faster than for all developing countries, and LAC will account for over 60% of total production.
- **Sugar Cane:** The 47% LAC share of developing country sugar cane production will decline over the next 30 years to 41%, despite increases of 22% in area and 29% in yield. Total LAC production by 2030 will be 833m tons, a 58% increase.
- **Potatoes:** The LAC 14% share of developing country potato production will remain broadly stable over the period to 2030. However, a 42% projected increase in area and a 24% rise in yields will produce an overall 61% increase in LAC potato production.
- **Banana:** LAC currently accounts for 43% of developing country banana production, but this share will fall to 36% by 2030 even though LAC production rises 36% to 32m tons. The average for all developing countries will show major increases in both area (23%) and yield (33%).
- **Vegetable oils:** Historically LAC growth in vegetable oils has been concentrated in soybean production in Brazil and Argentina and to a lesser degree in Bolivia, Paraguay and Mexico, accounting for more than half of the global expansion (11 m ha compared with global expansion of 20 m ha during 1961-97), supplemented by sunflower in Argentina (an expansion of 2 m ha cf. global expansion of 5 m ha). Global consumption of vegetable oils is expected to increase by one-third (in calorie terms) during the next 30 years, corresponding to approximately 2 % annual increase in production. Although the main increases in production will derive from oil palm, growth in soybean is expected to be strong, with a 73% increase in area and a 36% increase in yield producing an increase in total output of 140%. Sunflower will increase 122%. Although consumption in LAC

is estimated to expand 2 % annually, production in LAC is estimated to expand 2.5 % primarily from soybean and sunflower, increasing export volumes.

- **Fibre Crops:** Currently LAC produces 3.7m tons of cotton, 10% of world developing country output, but this has been declining strongly in recent years. However, this trend is projected to reverse in the future and increase by 92% to 7.2m tons (stable share of developing country production). Only the category "other fibre crops" is projected to decline in absolute output over the period to 2030, but is barely significant at less than 400,000 tons output on 326,000 ha in 1996.

Livestock

The cattle population in LAC (348 m in 1995-97) was 26% of the developing world total and has increased by 1.8 % p.a. in the last 3 decades, compared with 1.3 % pa for all developing countries. This growth has slowed considerably in the past decade, and is now slower than in the rest of the developing world. The population of sheep (88 m) has declined since 1970, accelerating to -2.8 % p.a. in the past decade. However, the population of goats (38m) has been increasing at nearly 1 % p.a. since 1970. The 30-year growth in other types of animals (including pigs and poultry) in LAC has been slower than for all developing countries.

During 2000-2030, the population of cattle is forecast to grow at 0.9 % annually, which is similar to the growth rate for all developing countries. The population of sheep and goats will increase by 0.7 % compared with 1.1 % for all developing countries. Pigs and poultry are expected to increase by 0.9 % and 1.6 % respectively.

Labor Productivity

From 1970 to 1990 the agricultural labour productivity in Latin America and Caribbean region increased at about 2.0% annually, compared with developing country averages of between 3.5-4.5%⁷⁴. The slow growth in labour productivity in LAC only partly reflects the abundance of land; growth rates have been particularly low in areas with higher concentrations of small farmers such as the Andes and Central America.

Trade

Average agricultural tariffs in 1995 (between 10 to 20%) were considerably lower than 10 years previously (20 to 60%). Nevertheless, the position of the different countries and products in respect of their competitiveness is extremely varied.

LAC currently accounts for a significant portion of world trade in a number of specialised commodities including: coffee (Brazil, Colombia, C. America); orange juice (Brazil); bananas (Ecuador, Honduras, Costa Rica); table grapes and contra-seasonal temperate fruits (Chile); vegetables (Mexico); cut flowers (Colombia, Ecuador); pineapple (Costa Rica, Guyana); shrimp (Ecuador, Honduras). Strong growth is foreseen in products that are currently significant in industrialised country agricultural systems, due to rising land and labour costs (sugar, cotton, citrus juice, vegetables), or to environmental costs that are considered too high (pork, mushrooms, possibly chickens).

Cereals: During 1995-97 LAC had an annual net trade deficit in cereals of 16m tons, which is projected to increase to 32m tons annually by 2030. This corresponds to a decline in self-sufficiency from 90 % to 87 % during the period. This decline is comparable to the situation in other developing countries (SSR from 90% to 86%) as net cereal imports rise to 270 m tons in 2030.

Livestock: LAC is the only developing region with a net positive livestock trade of 874,000 tons p.a. In contrast, the developing world as a whole has a current annual net livestock import balance of 412,000 tons. LAC livestock exports are expected to triple by 2030 to 2.5 m tons p.a., in contrast to the developing world trade deficit in livestock products which is forecast to increase dramatically to 7 m tons by 2030 (of which poultry accounts for almost 4 m tons).

Dairy: LAC has net imports of 6.3 m tons of dairy products, which are expected to grow to 7.5 m tons by 2030, in line with population increase. For developing countries as a whole, the net annual imports of 21 m tons will rise to 45 m tons.

Strategic Priorities and Interventions for the Region

The following strategic priorities and interventions derive primarily from a consideration of the four priority farming systems selected for analysis within LAC. Nevertheless, given that the analysed systems contain within their boundaries much of the high concentrations of poverty and growth potential in the region, it is believed that the conclusions presented below will be broadly relevant across the region as a whole⁷⁵.

The LAC region offers a sharp contrast between extensive frontier areas with low population densities and significant future growth potential, and established densely populated systems, many with a high incidence of poverty. Yet these two extremes share a number of common challenges that define a clear strategic focus for the LAC region over the next thirty years:

- **sustainable management of natural resources** and the reversal of resource degradation, both in established farming systems with high population densities, and in frontier areas where significant growth is anticipated;
- **improved access to, and control over, land** by poorer rural populations; and
- the capacity of farming systems, and their smaller producers, to respond adequately to **globalisation and market development**.

These overall strategic thrusts require specific strategies and interventions in each of the five principal categories outlined in the introduction to this study. Each of these is briefly examined below:

Natural Resource Management and Climate

Many farming systems in LAC are experiencing increasing levels of natural resource degradation. While established, densely populated systems display a wide range of characteristics, there is often an intimate linkage between size of holdings, degree of poverty and extent of natural resource degradation. In the absence of primogeniture or active land markets, fragmentation of holdings is a natural consequence of population growth over time. In the absence of improved technologies to increase yields and improve soil fertility this inevitably leads to soil mining and expansion of cultivation into sub-marginal areas, as farmers seek increased output to feed their families and generate necessary income. Predicted increases in population in “poverty” systems, such as the Established Tropical Drylands, the Mesoamerican system and the Central Andes, will only exacerbate these pressures.

Frontier systems with lower population densities face a different set of constraints. Settlement in these systems has been historically sparse, due in part at least to limitations in agricultural potential. Poor management practices can result in widespread damage and degradation to the natural resource base, as already recognized in the Cerrados.

Although the solution to this problem may lie partly in the other strategic priorities (see below), interventions appropriate to densely populated systems include:

- the development and implementation of effective, community-level natural resource management plans, including technical assistance and incentives for adoption (appropriate technologies are discussed below) and an emphasis on demonstrating rapidly realizable benefits from watershed, forestry and other resource management activities;
- moisture conserving technologies in dryer areas to combat the droughts and desertification (e.g. N.E. Brazil and Central Andes), as well as effective watershed protection to protect against torrential rains and flooding in wetter areas (Mesoamerica and Northern Andes). Both impacts are likely to become more common as a result of global climatic changes;
- Support to those sub-marginal producers occupying land unsuited to arable production in ceasing to cultivate these areas. Clearly, this approach will only be effective where alternatives livelihood options are offered. Thus work on income generation relates directly to strengthened natural resource management.

For frontier systems, where population pressure is much lower, intervention priorities include:

Development of a detailed knowledge base on natural resources and their characteristics within the system, and the linkage of this knowledge base to planning tools, as well as the identification, verification and dissemination of appropriate resource management approaches;

Research on the development or adaptation of crop varieties adapted to limitations of frontier zones (e.g. aluminium tolerance, post-harvest characteristics), and dissemination of results;

Settlement incentives tied to appropriate settlement patterns and land use, including taxation (regional and municipal); land grants; facilitated credit for investment or working capital; eligibility for support services (marketing, extension, veterinary services, etc.).

Science and Technology

A number of pioneering projects have shown that a range of technologies already exist and can contribute to improved natural resource management and drought tolerance, including:

- increasing soil organic matter content e.g. by legumes (*Mucuna pruriens* and *Canavalia ensiformis*);
- no-tillage cultivation, multi-cropping and small-scale irrigation linked to terracing on lower slopes and in semi-arid areas;
- vegetative barriers, contour protection, permanent crops and agroforestry on steeper slopes
- zero or controlled grazing of livestock, especially goats, with fodder crops and trees
- integrated management of fragile savanna soils (see Frontier Savanna case study)

However, increased research is needed on short-season and drought-tolerant crops suitable for small producers. More focus is also needed on technologies that increase labour productivity in systems with high levels of poverty. To increase the ability of smaller producers to compete effectively in growing international markets, research will also be needed in such areas as:

- adapting existing and future post-harvest technologies to the needs of smaller producers;
- appropriate IPM and organic cultivation practices and tools (e.g. biological controls);
- and field testing of new varieties/species and determining optimal agronomic practices.

Finally, experience in a number of countries suggests that strategic priorities within this category must include a reorientation of research towards a more participative approach working with small-scale producers and responding to their needs. Achieving this target will require considerable restructuring of national research organisations in many LAC countries, with particular emphasis on disbursement mechanisms for research grants and on field testing procedures.

Globalisation and Market Development

The globalisation of trade and markets is putting increasing pressure on many traditional farming systems as imported products increasingly compete in national markets, often undercutting local producers, at least in easily served urban markets. A rapid transition to free market conditions will increase poverty levels in farming systems, at least in the short term, as producers struggle to adapt. Those systems already associated with severe poverty are most seriously affected as they often lack the human, financial and technological resources to change. Yet globalisation and the reduction of trade barriers should also create opportunities for market development and diversification in all the analysed poverty systems. However, not all system participants are likely to be able to benefit substantially from such changes, due to limitations on human and natural resources and isolation from potential markets.

A number of options appear to be available to producers in systems under pressure, including diversification, off-farm employment and supported exit, but outside assistance is required to facilitate the process. Experience shows that, rather than create direct state-supported interventions, the most effective strategy is to promote an active and competitive private and civil sector in rural areas (see Mesoamerican farming system case study), involving the following possible interventions:

- assist farmers to organise themselves to respond to new opportunities, including training group leaders in management and administration; reduce obstacles to the creation and enforcement of contractual and other linkages to domestic buyers and exporters; promote value-added activities (selection, packaging, processing) through technical and financial assistance for quality standards, brand creation and targeted marketing; and financial support for required investments;

- reduce barriers to entry and costs of operations for small-scale enterprises and organisations active in input provision, marketing, finance, land markets and other services;
- provide infrastructure development and human resource training to meet the needs of larger-scale organisations initiating or expanding processing and other forms of non-farm employment.

One legitimate area of state intervention, however, will be applied research, where there is a strong need in all farming systems for improved varietal selection, to strengthen responsiveness of production to market demand, and for field trials of promising diversification crops. Although hybrid genetic material would be acceptable for diversification, it is likely that material capable of on-farm multiplication would be a prerequisite for traditional crops.

Policies, Institutions and Public Goods

Three key strategic areas are likely to dominate governmental and institutional roles within farming systems in Latin America over the next 30 years: (a) improving access to land and, to a lesser extent, water in poverty systems and among poverty groups in more wealthy systems; (b) promoting occupation alternatives for the rural poor who are not able to gain access to sufficient land and water to ensure an adequate living standard; and (c) strengthening public goods in rural areas. In all these areas government must inevitably play a major role, although preferably working in co-operation with civil society and private sector groups.

Improving access to resources: For the Mesoamerican and Drylands systems (arguably less so for the Central Andean system), existing severe poverty levels are directly related to problems of access to, and control of, natural resources, primarily land. Across LAC, in many farming systems a few producers occupy large areas of land, which are often utilised only at relatively low intensities, while most producers are constrained to smallholdings which are increasingly less viable. Civil conflict has often been a direct result. Effective land policies will also be important in frontier areas (e.g. frontier tropical savannas) where in-migration from neighbouring poverty systems could lead to conflict. Key strategic priorities for LAC include:

- improved functioning of land markets, through acceleration of cadastral and titling procedures, conflict resolution mechanisms, and changes in land tax structures
- land banks to buy both marginal and large holdings and resell land with the objective of consolidating smaller commercial holdings
- fiscal disincentives to under-utilised holdings and incentives for sale to land banks
- supported exit for sub-marginal producers, including where feasible, negotiating the purchase of traditional rights to land
- enforcement of legislation prohibiting illegal seizure of lands and other resources. This applies not only to powerful interests capturing state land, for example, but also to small producers illegally occupying private lands, and colonists entering indigenous community lands. Where such risks are perceived to exist, land may not be put on the market or offered for rental due to the fear of attracting squatters. This has become a major issue in recent years in the coastal zone of Guatemala, for example.

Supporting alternative livelihoods: Despite the opportunities that may exist for diversification and increasing output value among small scale farmers, it is not believed that more than a minority can ever escape from poverty by this route. There will inevitably be many marginal and sub-marginal farmers who simply lack the human, financial, locational and natural resource assets to benefit from these opportunities. Two broad alternatives exist, local non-farm employment and outmigration.

Non-farm employment offers a major route for escape from poverty in severely constrained farming systems, and if local, can be successfully combined with continuing subsistence farming operations. Policies, institutional support and public goods all can play a major role in promoting such employment. In some areas, tourism or 'maquila' operations (assembly of clothing, electronics, etc. in tax enclaves), provide opportunities, but their importance tends to be confined to specific areas. Natural resource-based industries offer an alternative employment source, but the disadvantages or rural compared with urban areas must first be overcome. National and local governments can cooperate with the private sector in the design of integrated programmes in which larger potential employers (agro-industries etc.) would be offered incentives to off-set the perceived advantages of urban operations. Elements might include:

- Improved infrastructure in the area of the plant and its suppliers (roads, electricity, water, and telecommunications). This might include a long term commitment from the employer to participate in financing maintenance of the infrastructure;
- Provision of training for future staff of the employer, in accordance with the needs of the enterprise;
- Assistance to the employer in supporting supply organisation among raw material providers (crops, livestock, etc.);
- The creation of rapid and transparent dispute arbitration and settlement mechanisms for suppliers and the employer.

However, Mellor⁷⁶ argues that the greatest growth in rural employment, and hence the largest impact on poverty, arises from a third source; provision of small-scale services and non-tradable goods.⁷⁷ Key interventions are also needed to help reduce transactions and establishment costs for small enterprises:

- Simplification of enterprise registration and approval procedures (hygiene, worker safety, IVA, etc.) for small companies;
- Assistance in preparing realistic business and investment proposals;
- Training in simple accounting and administrative procedures;
- More rapid and flexible financing of investments;
- Priority in connecting basic services (e.g. electricity, telephone, water, etc.).

Outmigration (urbanisation) has been the traditional response for those who are not able to participate in either diversification or non-farm employment. Despite having the most abundant natural resources per capita in the world, LAC also has the highest urbanisation rates, suggesting that this has been a common response. In recent years the tendency has been to focus attention almost exclusively on retaining the rural population in situ, and discouraging out-migration. Yet, if little potential exists for substantial increases in quality of life within the system, this retention policy must be questioned. Indeed, it is timely to identify and implement measures to ensure that any process of out-migration is a positive process, both for those migrating and for those remaining within the system. These would include innovative measures for increasing the human and financial capital of migrants so as to ensure better economic possibilities in the future. Several key interventions are possible:

- targeted out-migration incentives, providing capital to would-be departees handing over of control of any lands currently occupied to conservation authorities – where sub-marginal for cultivation or even agricultural purposes; facilitation of credit to would-be buyers where the land could consolidate the holdings of a neighbour, etc.
- in-migration incentives to preferred areas, either rural (where frontier lands exist) or urban, where there is an interest in channelling migrants to specific intermediate cities.

Strengthening public goods. Although infrastructure provision in LAC is increasingly recognised as a private sector activity, rural roads, electrification and small-scale irrigation are still predominantly public goods, and essential for market development in many areas. The withdrawal of the state from many rural institutional activities (banking, extension, marketing) renders support and oversight of civic and private institutions essential.

Information and Human Resources

Accelerated rates of change appear inevitable in traditional systems, requiring improved information and human resources. Information provision by the public sector involves substantial recurring costs and is frequently irrelevant to real market needs, so the service is best provided by private sector buyers and traders, although it is necessary to ensure competition in market operations by eliminating barriers to entry and improving rural infrastructure.

Human resource development should focus on actual training needs. Not all rural inhabitants are agriculturists, and besides literacy training this population also needs more utilitarian skills involving sewing, mechanics, welding, cooking etc. Such skills may also assist out-migrants in finding employment at their destinations. Training should also specifically address employee needs in rural areas (whether agro-industry or non-agricultural).

Appendix 7 The Role of Rural Finance

What is Rural Finance? “Rural finance” refers to the broad range of financial services provided by “formal” and “informal” suppliers operating in the context of “rural financial markets”. Spatial dispersion, covariance risk and seasonality accentuate the constraints faced by suppliers and consumers of financial services in rural financial markets, resulting in less access of low-income rural households and small businesses to formal financial services.

Definitions: In the context of this strategy, “rural finance” refers to the collection of services (including savings, lending, payments management and insurance) provided to rural inhabitants and businesses for the management of their financial assets and flows. The “rural financial market” defines the incentive framework within which suppliers provide financial services to rural consumers. Supply of financial services is generally divided into “formal” and “informal”. Formal supply refers to financial institutions such as banks, finance companies, cooperatives, credit unions, insurance companies which are generally subject to some form of regulation, oversight or less frequently, supervision. Informal supply of financial services covers a broad range of alternatives whose financial activities are not subject to regulation or oversight, including input suppliers, marketing intermediaries and processors, money lenders, community funds such as *ROSCAs*⁷⁸ and even family members and own assets.

What distinguishes rural finance from urban finance? The additional costs resulting from spatial dispersion and covariance risk in rural areas accentuate the constraints faced generally by low-income households and small businesses in accessing formal financial services. As in urban financial markets, the relative dependence on formal vs. informal financial service suppliers is generally positively correlated with the income level of the household or size of the business. This is due mainly to the higher intermediation costs per unit of transaction (transactions costs) resulting from servicing small loans, or managing small deposits, withdrawals and payments. It also reflects the relative informality of smaller enterprises which generally have less verifiable financial information, such as tax returns or paychecks, required by formal financial service providers.

These transactions costs associated with *scale* are accentuated in rural financial markets by the *spatial* dispersion of clients, and the vulnerability of rural activities to *covariance risk* and *seasonality*. The spatial dispersion in rural areas results from low population densities which further increases the costs borne by suppliers (on-site verification of assets and cash flow) and consumers (travel for application, disbursement and repayments) of rural financial services. Private and public banks, to the extent that they are willing to provide retail financial services in rural areas, generally attempt to recover these costs by officially or unofficially establishing minimum sizes of transactions or imposing fixed service fees which can be quite high relative to the small amount of savings, borrowing or payments required by low-income clients.

The dependence of rural economies on natural resources-based and particularly agricultural activities subjects rural financial markets to additional intermediation costs. The vulnerability of many rural activities to random events such as floods or droughts, results in the *covariance risk* of losses resulting from the impact of such events over an entire community or region. The *seasonality* of income flows results in the financial requirements of the community or region moving in tandem, and combined with covariance risk, results in substantial exposure for rural financial service providers, particularly if their clients are primarily agricultural.

These additional costs and risks have limited the role of formal financial service providers in rural areas and resulted in informal sources, particularly family and own-assets, providing a larger proportion of financial services relative to urban areas. For example, in Mexico, access in the largely rural states of Oaxaca and Hidalgo, roughly measured by population per bank branch⁷⁹, is less than half the country average and between one fourth and one-sixth that of major urban centers.⁸⁰ The situation is similar in the Northeastern and Northwestern regions of Argentina, home to over 70 percent of the country’s small, rural producers.⁸¹ The limited access to formal finance is reflected in the source of credit in rural areas. In Mexico surveys indicate that while less than 10 percent of rural entrepreneurs have utilized formal credit, over 40 percent have obtained credit from informal sources⁸².

Why Rural Finance? Improved rural finance directly supports our poverty reduction mission by supporting economic growth with increased participation of the poor. It is consistent with the three priority areas identified in the 2000/1 WDR by:

- Increasing *opportunities* for the poor through stronger rural economic growth and working to include the poor so that they can derive greater returns to the deployment of their assets;

- *Empowering* the poor through providing access to services based on ability to pay, rather than race, ethnicity or social status;
- Improving *security* both of financial assets as well as the opportunity to utilize assets more effectively to reduce vulnerability.

In addition, improved rural finance can have important fiscal effects by improving the returns and sustainability to public investments in rural areas, and by reducing or eliminating public spending to support rural credit programs. These public benefits as well as the limited incentives for private financial intermediaries to improve service provision justify public action to improve rural finance.

Improved rural finance contributes to rural economic growth. Well-functioning financial markets is understood to be a key component of market-based economic growth, and this can be particularly important in rural areas⁸³. In rural areas, a larger proportion of the economic output is in the form of tradable goods which must compete primarily on the basis of price as well as quality. This is particularly true in Latin America where economic reforms have resulted in some of the lowest agricultural protection rates in the world⁸⁴. As a result, input costs are an essential component of competitiveness, including the cost of capital to finance other inputs and investments in productivity improving goods and services in order to complement the region's abundant natural resources and relatively well educated labor force.

Improved rural finance increases the ability of the poor to participate in rural economic growth: Improved rural financial markets can be particularly important for the rural poor by reducing the costs and improving the quality of their financial services⁸⁵. Lack of access to formal financial services forces the rural poor to resort to trade credit, moneylenders, family and friends for credit. Savings, including substantial transfers from remittances, are held in cash and physical assets (i.e.: housing and livestock). While in many cases these informal sources may offer advantages relative to formal suppliers, they are often more costly, higher risk and less fungible than existing formal savings, credit and payments management services, even allowing for an expected difference in price to account for the higher costs and risks of supplying these services in rural areas. At the least, access of the rural poor to lower cost formal financial services can increase their net incomes, improve consumption smoothing and reduce their vulnerability to adverse shocks. At best, increased access to formal financial services provides resources for investment and maintenance of productivity enhancing activities in diversified agricultural and non-farm activities which allows them to better participate in a globalized, open market economy.

Improved rural finance increases the impact of public investments in rural development: Improved rural financial markets are likely to result in enhanced sustainability and returns to public investments in rural infrastructure and technical assistance, particularly in the case of community based development activities. Improved rural finance may also be necessary to realize the expected benefits resulting from land titling programs.

Most public investments in rural areas are focused on investments such as roads, potable water supplies, electrification, irrigation and on-farm equipment or constructions, with little allocation for recurrent costs such as maintenance and upgrades. While communities are generally interested in leveraging their social capital to develop mechanisms to sustain and expand the benefits received from these new assets, limitations in access to formal financial services can increase the cost and risk of establishing and managing local funds. For example, in Mexico⁸⁶, the lack of accessible, safe, financial institutions, means that the funds collected to finance future investments cannot be placed in a savings account which provides transparency and a return which at least maintains its real value. In addition, mechanisms are not available to permit the prudent lending of these funds to finance development needs of local individuals. In cases where urgent needs exceed a community's savings, there are few opportunities to borrow on terms competitive with those of the general financial market, maintaining the community's dependence on public funding or resulting in the collapse of the initial investment.

In the case of land titling, analysis in Latin America suggests that the expected benefits, including improved natural resources management and land distribution, are largely dependent on the ability of rural financial markets to provide credit against the enhanced collateral represented by titled land. In situations where access to less expensive, formal credit is skewed towards larger farmers, the benefits of land titling will be skewed accordingly, actually increasing the distributional disparities.⁸⁷

Improved rural finance reduces direct public expenditures: The lack of viable alternatives has resulted in the perpetuation of highly subsidized, publicly-funded development banks and lines of credit with few benefits for the rural poor. The traditional response of governments in LAC, and throughout the world, to the limitations in rural financial markets has been to establish public banks with the responsibility of financing agriculture and other rural

activities. These banks, and the directed credit programs associated with them, have generally been “captured” very quickly by interest groups representing larger agricultural and rural interests, resulting in consistent rescheduling and forgiveness of debt⁸⁸. The cost of these public subsidies is considerable. In Mexico, public support of the rural financial system from 1983 to 1992 cost the government over US\$28 billion of which 81% was associated with subsidized interest rates. In Brazil, 78 percent of rural lending in 1990 came from official sources with subsidized interest rates, however only 27 percent of this credit went to small farmers with the rest going to larger commercial farmers.⁸⁹ While many governments in LAC have taken measures to reform or eliminate public banks and credit lines, these efforts have been limited by the perceived lack of alternative mechanisms to address the underlying justification for these banks and credit lines, irrespective of how imperfectly the current mechanisms operate. Many governments are interested in reducing the cost and dependence of public banks for rural lending, but want to see viable options which will result in increased service coverage⁹⁰.

Justification for public action in rural finance. The important benefits of improved rural finance, particularly for the participation of the rural poor in economic growth, suggest that access to financial services is a legitimate public policy concern⁹¹. However, does this concern justify public intervention? Can this concern be addressed simply by freeing market forces? A simple analysis suggests that market forces alone may not be sufficient to achieve this public policy objective.

A number of theoretical arguments have been forwarded to justify public intervention in financial markets based on identification of markets failure.⁹² These market failures are expressed in terms of the disparity between incentives faced by public and private actors. For example, analysis in Brazil⁹³ shows that, similar to Mexico and Argentina, access to financial services is much lower in the poorer and more rural Northeast Region of the country where both Government and Bank rural development efforts are concentrated. However, while policymakers may view the region as under-served relative to other regions of Brazil, this may be at odds with the views of private bankers. From the perspective of the commercial banker who earns her money on the basis of funds intermediated, the potential for service expansion as measured by the rough proxy of GDP per bank branch, suggests that the Northeast Region is, in fact, over-served relative to the rest of the country. This situation is generalizable to much of Latin America and suggests that the incentives for private, formal financial service providers to increase their presence in poor, rural areas are limited, unless they can significantly reduce their intermediation costs or identify lines of business with superior profitability to other regions. The challenge is to facilitate this process through public action mechanisms which, unlike past actions, are sustainable and result in financial services effectively reaching low income households and small businesses in rural areas.

How do we approach Rural Finance? The LAC region’s approach to rural finance reflects past experience – both positive and negative – as well as the Bank’s adoption of the “financial sector paradigm” for rural finance. As a result, a number of activities focused on general financial sector development, as well as promising recent initiatives to address the specific constraints to improved rural finance, form the basis for the LAC Rural Finance Development Strategy.

Learning from the past: Improved access to rural finance has long been an element of rural development strategy; however, the approach taken by the Bank in general and LAC in particular has evolved significantly over the past 30 years. Consistent with the rest of the Bank, the key turning point can be marked by OED’s report, issued in 1993: “A review of Bank Lending for Agricultural Credit and Rural Finance (1948-1992)”⁹⁴, (commonly referred to as the “Levy Report” after its author) and the resultant withdrawal from direct support of rural finance in LAC.

- *Directed credit lines don’t work.* In the “pre-Levy Report” era, Bank assistance focused on directed credit lines, primarily through public banks, which were supposed to ensure delivery of investment credit on “reasonable” terms to farmers for investments in yield-enhancing technologies. The experience with these credit lines in LAC was consistent with the problems outlined in the Levy report in terms of the tendency of funds to go to larger, better off farmers, application of funds in speculative rather than productive investments and very poor financial performance on the part of the intermediary institutions in terms of loan recovery and costs.
- *Macroeconomic and sectoral policy constraints must be addressed first.* In addition, it became clear that macroeconomic and sectoral policy constraints were generally more important impediments to sectoral growth than credit constraints. During the 1990s, emphasis shifted to improving the enabling environment for rural activities, including reform of macroeconomic (overvaluation of foreign exchange rates, taxes on exports and imports of inputs) and sectoral (marketing boards) policies as well as improvements in the basic phytosanitary services required to gain access to foreign markets.

Adopting the financial sector paradigm for rural finance: While the LAC region focused on the non-financial aspects of the rural economy in its operational work, a significant shift occurred in the Bank's approach to rural finance consistent with the "financial sector paradigm" associated with Ohio State University⁹⁵. This approach⁹⁶ considers rural finance as part of a country's overall financial services market, with specific constraints resulting from the spatial, seasonality and covariance factors discussed above (see Section I). The approach recognizes that financial services such as savings, payment management and insurance are at least as important as credit to rural inhabitants and enterprises. The approach also focuses on the development of sustainable (subsidy-free) financial institutions and recognizes that rural clients are willing to pay the full cost of these services if they are designed and delivered consistent with their specific needs.

The LAC region's support to development of rural finance reflects this paradigm. Operational activities have focused on improving the functioning of overall financial markets through measures which address the incentive framework for private financial service providers. Financial sector reform has focused on increasing competitiveness, redefining the role of public banks, and strengthening the regulatory and supervisory framework for financial institutions. Introduction of innovations in the commercial code permits collateralization of a wider range of assets, and measures to improve the regulations for development of credit information registries reduce the costs to financial service providers of assessing individual credit risk.

- *Opening up the financial sector to increased competitiveness and productivity.* Limits to entry of new financial entities, particularly foreign banks, allows many banking sectors in LAC countries to realize high profits despite low productivity levels. As a result, financial institutions have focused their activities on high volume, money-center banking based in large cities. Through dialogue, ESW, financial sector adjustment papers (FSAPs) with the IMF, financial sector adjustment loans (FSALs), the Bank has supported the opening up of financial sectors in Argentina and Brazil to permit foreign ownership of domestic banks and/or entry of foreign banks. In most cases, domestic banks have been forced to aggressively develop retail banking as they have lost market share to these new entrants in the more lucrative markets. Nonetheless, most banks have little understanding of rural financial markets and are reluctant to undertake the investments in research, product development and design of delivery mechanisms required to effectively serve this new market until they have exhausted opportunities in more familiar, urban markets.
- *Redefining the role of public banks* – In many LAC countries, public banks still account for a large proportion of the retail outlets and credit provision in rural areas. Their activities are subsidized directly by Government through provision of funds at low cost and recapitalization to cover losses, and indirectly through mandatory allocations of deposits to programs managed by public banks and by more lenient Central Bank regulations such as loan loss provisioning and financial accounting of accrued income on non-performing loans⁹⁷. While they were initially seen as the obvious solution to the rift between public interest in access and private focus on profitability, they have proven to be both expensive and ineffective in achieving the public policy objectives of reaching low income rural residents. The governance structure of public banks has generally proven to be highly susceptible to a focus on political, rather than financial returns, and this has been transmitted to the staff of these banks through their internal incentive structure. As a result, while the largest agricultural enterprises will often obtain some financing from private banks, the public banks generally focus on the middle to large clients which would provide the most attractive retail market for private banks entering rural lending.

The Bank has supported privatization and liquidation of public banks (Argentina, Nicaragua) through TA, FSALs and specific investment loans (SILs). Again, while private owners have generally improved the financial health of these institutions, privatization has not generally been followed by a significant increase in private bank lending for rural activities⁹⁸ even when the privatization has included a moratorium on closing of rural branches. In cases where government is not willing to privatize or liquidate, the Bank has suggested determining the real subsidy cost of providing financial services through these banks⁹⁹. The Bank has also suggested that any subsidies to compensate the banks for serving rural and low-income clients be provided transparently through a direct interest rate subsidy rather than through general institutional or operational exemptions which obscure the true cost and undermine performance incentives of the staff of the bank.¹⁰⁰ While there are several examples of successful reforms of public banks, mostly in Asia, there is no consensus regarding when and how this should be undertaken.¹⁰¹

- *Inadequate legal, regulatory and supervisory environment, particularly for non-bank financial intermediaries* – In many rural areas, non-bank financial intermediaries (NBFIs) are more prevalent than banks and have a larger proportion of low-income clients¹⁰², despite their relatively small share of the overall financial market. However, many of these institutions operate outside the legal and regulatory framework of the banking sector

and are only subject to self-regulation or no oversight at all.¹⁰³ This has resulted in several financial failures, in many cases resulting in the loss of savings by low income, rural households. This limits their role in development of the rural financial sector as potential clients are justifiably hesitant to trust these institutions, and their generally weak operational capacity limits their ability to expand the coverage or variety of their services. While there is agreement that it is not generally feasible to apply the same supervisory regime to NBFIs as to banks, there remains disagreement regarding the appropriate alternatives, and specifically to what degree the functions carried out by the Central Bank authorities in the case of banks can be delegated to third party entities.¹⁰⁴ The Bank has supported, through ESW, FSALs and IDFs, legal and regulatory reforms to extend supervision through delegated or other means to non-bank financial intermediaries such as cooperatives, credit unions, NGOs, etc. (Mexico, Bolivia, Columbia and El Salvador), and CGAP is working with NBFIs and the regulatory authorities in Guatemala to pilot alternative supervisory mechanisms. In all cases, emphasis has been placed on providing institutions time to strengthen themselves consistent with the provisions of the legislation so as to maintain the maximum number of potentially viable institutions already operating in rural areas.

- *Improving the Framework for Secured Transactions* - Revision of the laws and regulations which define the framework for secured transactions can significantly expand the creditworthiness of individuals and businesses. Limitations in most LAC countries¹⁰⁵ in the laws which define *creation* of the security interest, the registries which permit *perfection* of the security interest, and rapid legal remedies to permit repossession and sale to support *enforcement* of the security interest result in real estate providing the only viable guarantee for loans. Given titling problems and the fact that small rural producers, processors and service providers¹⁰⁶ often have equipment and inventories worth several times the assessed value of their real estate, these limitations can severely reduce the amount of credit available to rural enterprises from banks as well as significantly reducing the capacity of intermediaries such as equipment suppliers, warehouse operators and traders to intermediate credit to producers.¹⁰⁷ The Bank, through ESW, FSALs and SILs, has supported the review and drafting of new legislation to strengthen commercial laws, modernization of registries, and development of accelerated repossession proceedings. The impact of these reforms has been limited by partial implementation of the three components of the secured transactions framework. Reform of the commercial code has not been complemented by sufficient development or modernization of property registries, and while there has been general support for the concepts of the law, acceleration of repossession proceedings has encountered delays consistent with general legal reform and concerns raised by consumer protection advocates.

Development of Credit Information Registries - While most countries have some credit information, the degree of development and usefulness of the registries varies widely throughout LAC. Limitations in access to and quality of information limits their usefulness as a tool in reducing the costs of credit application for the borrower, and evaluation for the lender, through development of credit scoring models¹⁰⁸. In most countries, information on credit transactions is limited to regulated banks. In the case of rural inhabitants and businesses which, as discussed above, are more likely to utilize non-bank financial service providers, integrating information from transactions with NBFIs, input suppliers and intermediaries is essential to permit development of credit histories. The Bank, using ESW, SILs and IDFs, is working with governments to develop the regulatory framework for credit information registries (Argentina, Brazil) which permits recording of a wider range of financial transactions and which provides potential creditors with suitable access to the type of information required to develop credit scoring models, while simultaneously providing sufficient protection to consumers. IFC is working with private companies to develop and expand for-profit credit information services.

Limited results on the ground: Despite progress with macroeconomic and sectoral reforms, opening of the financial sector, a reduced role for public banks and directed lines of credit, reform of the regulatory and supervisory framework, new secured transactions legislation and improvements in credit information, the supply of formal, rural financial services in LAC has not expanded rapidly to meet the potential demand documented by rural household surveys. Financial institutions have not reacted as quickly to the new incentive structure as was expected. Private banks have generally been reluctant to expand service provision in rural areas despite aggressive expansion of urban-based retail banking, due in part to their perceived lack of understanding of the rural market conditions. In addition, international financial crises, the consolidation of financial institutions and new opportunities, such as pension management have occupied the management attention of these institutions. Slow progress in legal reform has also limited the ability of financial institutions to exploit new options in the commercial code.

In many countries, public banks operating with a substantial subsidy are still the dominant providers of formal financial services in rural areas. In Argentina, public banks account for approximately 60 percent of agricultural

credit¹⁰⁹. In Brazil, the *Banco do Brasil* accounts for the largest proportion of rural lending. Though there is increasing awareness on the part of policy makers that these institutions can be ineffective and are generally inefficient in reaching the rural poor due to lack of incentives (financial or political) to evolve required products and technologies, they are unwilling to reduce the role or eliminate these institutions unless they are confident that their functions in rural lending will be taken over by the private sector. In countries which have eliminated or substantially reduced the role of public banks, such as Peru, Columbia, Mexico, Nicaragua, the private sector has generally moved slowly into provision of rural financial services, focusing on the larger clients and making few, if any efforts to serve lower income, rural clients¹¹⁰. In some cases governments have then turned to even less efficient mechanisms for provision of rural financial services.¹¹¹

Addressing Rural Constraints: As general financial sector reform has not been sufficient to achieve the objectives of increasing access to sustainable financial services in rural areas, the Bank has been working increasingly in LAC to identify and address those constraints which are of particular importance for provision of rural financial services. Many of these activities involve directing public support to individual institutions. Unlike the previous credit lines, however, this support is focused on activities which have public goods and spillover effects in terms of innovations, local adaptations and testing in a specific country environment which can then be utilized more broadly. In addition, any subsidies will be transparent and measurable, explicitly limited in amount and duration.¹¹² Importantly, these activities are intended to improve access to the full range of financial services, including savings and payment management services – as well as credit. These activities address the additional constraints associated with the transactions costs and covariance risks faced in rural financial markets:

- *Integrating rural issues in the general financial sector dialogue.* Government actions and policies in rural finance are driven as much by Ministries of Agriculture and rural producer organizations as they are by Central Banks and Ministries of Finance. Efforts to move country policies away from the supply-focused, subsidized, directed credit approach towards improvements in the rural financial market which improve access to a broad range of sustainable financial services requires that the concerns of producer organizations are acknowledge and taken into account in the development of specific policy reforms and proactive activities. While many producers, particularly larger producers who directly benefit from the subsidized system, are unlikely to support such reforms, clarification of the key issues can reduce the impact of misinformation and assist governments in developing policy packages which at least acknowledge sectoral concerns.
- The Bank, in the context of ESW, FSAPs and FSALs, has supported the efforts of governments to integrate sectoral concerns in the development of policies and reforms. Attention has generally focused on resolution of failed, public agricultural banks, though, in some instances, issues of the structure and safety of the financial system in rural areas – including regulation and supervision of NBFIs, the impact of public bank liquidation or sale on access to financial services in rural areas, and the impact of financial sector crises on the rural economy are being included in the scope of these activities. Nonetheless, rural financial issues are rarely a central aspect of the general financial sector analysis and dialogue. The failure to develop and agree with governments on alternative, rural finance strategies has contributed to a new wave of political initiatives to establish subsidized, public agricultural banks. The development of practical, rural finance strategies and instruments which are consistent with the financial sector paradigm is an area of under-investment in the LAC Region which requires additional investment in knowledge gathering, piloting and partnership with country clients, other donors, such as IDB and USAID, which are utilizing this same approach in the region, and practitioners.
- *Assessing rural financial markets.* In most LAC countries, there is little information regarding the actual sources of and potential demand for rural financial services. As a result, the effectiveness of subsidized public banks and directed credit programs in reaching low-income rural clients is usually overestimated, and the importance of other formal, and particularly informal, sources of finance are underestimated. In addition, the willingness to pay for financial services as demonstrated by the direct and indirect costs actually borne by rural customers, the degree of diversification of income sources, and the propensity to save in rural communities are all often much higher than assumed, *a priori*.

The Bank, using ESW and SILs, has supported the design, implementation, processing and analysis of rural surveys focused on financial services both for the development of public policy, as well as to inform the selection, design and assessment of direct interventions. In many ways, this is the Bank's area of strongest demonstrated comparative advantage relative to other donors. Experience has demonstrated that given the high fixed costs of field work, the most cost-effective approach is to integrate a rural finance module in an ongoing LSMS or other household survey (Nicaragua). However, in countries where this is not an option, dedicated surveys have been carried out, particularly when focused on particular regions of the country (Mexico). Where proactive measures are being designed, these

surveys are complimented by assessments of the principal institutions providing financial services in rural areas, in order to assess their financial strength, outreach to low income, rural clients and product designs (Mexico).

Supporting development of rural microfinance services. Microfinance has proven to be an effective mechanism to reduce transactions costs associated with providing financial services to small businesses and low income individuals. Application of microfinance “technology” can substantially reduce the transactions costs incurred by suppliers and consumers of rural financial services. Through the careful training of loan officers in the evaluation and servicing of clients, the sharing of information gathering costs with clients by using solidarity groups, and the acknowledgment that the most important repayment incentive is continued and rapid access to credit, several programs have been able to reach large numbers of clients with small-value lending and savings services while maintaining high quality portfolios, and even achieving profitability. These programs generally develop from NGO programs into regulated and supervised intermediaries or as specific programs or divisions of public or private banks.

The existence of a well-functioning microfinance program can serve as a base for developing suitable financial products for rural microfinance clients, or existing rural financial institutions can adapt the microfinance technology to reduce the costs of serving low income regions and clients. While the LAC region is a leader in the development of microfinance worldwide, it lags other parts of the world in the outreach of microfinance to rural areas¹¹³, with some important exceptions such as CALPIA in El Salvador and village banking programs throughout Central America.

The Bank, using SILs and FILs, is supporting technical assistance and funding in order to accelerate the transfer of international best practices in microfinance to interested financial institutions operating in rural areas. In countries in which there are no suitable institutions already operating with microfinance in rural areas, assistance has been focused on an individual institution (Brazil). In cases where a number of suitable institutions are already operating, apex-type approaches are being used. (Mexico) In all cases, support is focused not on overall institutional strengthening, but on improving the institution’s capacity to deliver sustainable financial services¹¹⁴. As such, technical assistance is focused on reducing the transactions costs and aligning the incentives faced by staff and clients through product design, employee training and application of technology (credit scoring, ATMs, smart cards, etc.)

Developing “social intermediation” in rural communities. While introduction of microfinance services focuses on strengthening the supplier’s ability to take measures to reduce transactions costs, assistance to communities in organizing themselves to manage village funds can reduce the costs to the consumers of financial services by providing an interface between financial institutions and individual communities¹¹⁵. “Social intermediation” is an approach which focuses on “investment in building up the *human resources* and *the local institutions* needed to help marginalized groups become self-reliant¹¹⁶. Social intermediation strategies can be divided into those which “link” the organized poor to a formal financial institution, or “parallel systems” which create alternative financial systems, usually group-based, as an alternative to existing, formal institutions..¹¹⁷ The best-known application of the parallel approach are the village banking programs supported by FINCA, Freedom from Hunger and CARE. While effective in reaching very poor clients in isolated areas, the financial sustainability of these programs remains in question, as well as the ability of the groups to operate independently without continued organizational and management support from the sponsoring agency.¹¹⁸ Recent experience with the linking approach in the Philippines and Mexico has demonstrated that a carefully developed village banking model can be utilized by well-run credit unions to significantly extend both the breadth and depth of their outreach in rural areas.¹¹⁹

Bank rural development projects in LAC are strongly community-based with emphasis on development of social capital through participatory decision making and social monitoring by the community of subproject expenditures and implementation. The Bank is supporting the leveraging of this social capital through components in SILs which finance community based rural development projects, including rural investment funds (Mexico) and social funds (Nicaragua, Honduras). The social intermediation components provide training and technical assistance in organization, simple accounting and cash management to help communities form community savings associations. Links to formal financial services are also facilitated directly by providing communities with information regarding the supply of financial services in their region and the requirements and obligations of the client and supplier of the services. These programs are also gathering community information requested by financial service providers to assist them in identifying markets and developing outreach strategies in rural areas. These efforts are still in the pilot stage and are being monitored closely in conjunction with the Community Based Rural Development Thematic

Group to develop activities which can be incorporated more generally in the numerous rural and social funds in the region.

Supporting pilot programs to develop risk management instruments: Improved rural finance requires the development of cost-effective instruments which allow producers, intermediaries and others to mitigate their exposure to covariance risk in order to smooth consumption as well as to improve potential access to credit. The covariance risk associated with lending to farms and agriculturally related industries is perceived by financial institutions as a significant impediment to expanding lending services to rural areas. In the absence of formal insurance mechanisms, borrowing from public banks is used by rural entrepreneurs as a *de facto* insurance mechanism. Public banks will generally provide rescheduling of debt or even debt forgiveness in cases of severe crop losses due to weather, with the government treasury covering the resulting bank losses. Potential borrowers are therefore likely to utilize a public bank irrespective of its lower quality service. Insurance products permit separation of the insurance function from the lending function, providing private lenders with the opportunity to compete on a level playing field with public banks.

The Bank, through ESW (Mexico and Argentina) and SILs (Nicaragua), is providing technical and financial support to governments to develop broadly accessible risk management mechanisms for rural areas. These activities are focused on the development of the information base and management systems required to support these products in the private sector (in some cases in coordination with potential IFC investments). In the case of insurance, the goal is to develop products which (i) can be reinsured in international markets; (ii) minimize government's role relative to the private sector; (iii) reduce government's average expenditures and exposure in the event of climatic disasters; (iv) are financially and administratively accessible to small-scale rural entrepreneurs; and (v) strengthen incentives to take preventive measures to minimize potential losses. The Bank is also assisting countries with review of existing emergency laws and regulations which impede increased private sector provision of insurance coverage in rural areas. In the case of Argentina, the Bank is supporting the government's attempts to develop a "360-degree risk management framework" which would also facilitate access to price risk protection through futures contracts, and in Mexico, IFC has invested in providers of commodity storage services which facilitate retailing of futures price contracts to producers as a hedge during the storage period.

Extending land titling: Secure property rights to land has traditionally served as the primary means of accessing credit. This is particularly true in rural areas where formal lenders and borrowers utilize the guarantee of titled land as a substitute for the expensive and complex task of calculation of expected cash flow of the business or household. The time and cost of repossession of land in the case of default generally limits the amount which can be borrowed to 50 percent or less of the appraised value of the land¹²⁰. Even in the case where the secured transactions framework is reformed, land will remain the most important "pledgable" asset of most low-income rural inhabitants. In addition, the imperfections in tenure arrangements result in a number of inefficiencies in land markets which adversely impact natural resources management and income distribution in rural areas.¹²¹

The Bank, using ESW and SILs, has supported a number of projects to improve land titling¹²². These programs seek to improve the efficiency and reduce the cost of titling to permit broader coverage, particularly to small holders and indigenous communities. The programs also support improvements in the functioning of land registries, and in particular the quality of information and ease of access.

Establishing enforceable quality standards: In addition to the previously discussed limitations in the general framework for secured transactions, agricultural credit is also constrained by the lack of consistent and enforceable quality standards for many agricultural products in LAC countries. The absence of standards limits the ability to define commercial contracts for the financing and trade of commodities, including securitization of stocks held in warehouses (warehouse receipts). This is particularly true in the Central American countries where trade in corn and other products includes varieties not described by existing international standards. The Bank, using ESW and SILs is currently supporting the development of such standards and enforcement mechanisms in El Salvador.

Developing rural information systems. Information in individual credit histories can be complemented by aggregated production information to assist lenders in calculating the risk of potential loans, further reducing credit application and evaluation costs. Standard credit information systems are limited to individual client repayment history and, in some cases, salary histories, and are used to develop credit scoring models which predict the probability that a potential borrower will default on his repayment obligations. Potential lenders can complement this information with aggregated production and price data to predict the expected cash flow of non-salaried, rural producers. These models significantly reduce the information requirements which must be provided by potential clients such as records on past production and prices, as well as reducing the need for field verification. The Bank,

through components of SILs, has supported the development of these models (Mexico), focusing on countries with extensive information over relatively small geographical areas.

Moving Forward: A Proactive Approach to Achieve Results on the Ground: The LAC rural finance strategy will develop the region's capacity to provide our clients with analytical, strategic and operational support for the development of financial service markets in rural areas consistent with the financial sector approach. The strategy will focus on expanding activities which address constraints specific to improving rural financial intermediation. The strategy complements the gains achieved in improving the enabling environment for rural development and financial markets in general, by supporting actions which directly facilitate the introduction of international experience and local innovations to overcome current constraints to the delivery of financial services in rural areas, particularly to the poor.

Given the current budgetary environment in the Bank, the strategy is designed to permit implementation over a range of resource scenarios. Under a "high budget scenario", the implementation would include a highly concentrated effort bringing together rural finance specialists from throughout the Bank and external to the Bank to work with counterparts over the period of six months to one year with a client country with which there is broad agreement on the main parameters of rural finance development. This scenario would require substantial additional funding from within and outside the region, as well as recruitment of Bank staff and external partners.

Under a "low budget scenario", incremental funding would be limited to that required to support the minimum, baseline activities which underpin the basic elements of the strategy as described below. These expenditures would include staff time for improved cross-sectoral collaboration in strategy development and information sharing, ensuring sufficient budget for high quality technical supervision of rural finance pilot components and projects, and basic knowledge management activities such as convening of other donors and practitioners to share regional and international experience to-date.

In order to maximize the results on the ground, implementation of the strategy will be *dynamic, opportunistic, operational, monitorable* and *replicable*. While responsibility for successful implementation will lie with LCSES management and staff, the strategy will require close coordination and collaboration with other Bank units, particularly LCSFP which is leading activities to strengthen the overall financial sector. The strategy embodies an approach which will require: direct support from Bank management in terms of resources; Bank staff across the institution, in terms of selectivity and collaboration; clients, in terms of commitment; and actual and potential partners, in terms of sharing knowledge and experiences.

Dynamic – Ensuring learning and innovation: Our knowledge of rural finance is dynamic and will continue to deepen. In order to ensure that our rural finance activities reflect our knowledge to-date as well as expanding our knowledge of what works in rural finance, knowledge management will be an explicit part of the strategy. LCSES's installed technical capacity will have to be strengthened, but given limited resources, knowledge development will depend primarily on closer collaboration with other institutions which are devoting far greater resources to researching and implementing rural finance activities in LAC, such as IDB and USAID. Addressing important knowledge gaps, such as sustainable agricultural loan product development, accessible production and price insurance products and the role of community social capital in rural finance development, will require explicit efforts to learn from others as well as learning directly from our own experiences.

- Establishment of LAC steering group for rural finance led by LCSES and LCSFP with representatives from LCSDH, RDV, FSD and IFC. The steering group will have responsibility for identifying the key issues to be addressed, promoting incorporation of rural issues in the region's broader financial sector activities – particularly FSAPs and FSALs, supporting development, testing and dissemination of pilot initiatives, and providing regional management with updates every six months regarding the status of strategy implementation and highlighting any promising innovations or issues identified through Bank-supported activities as well as through consultations with others;
- Build LCSES technical capacity in rural finance through hiring of rural/micro finance specialist, secondment from FAO or IFAD, or sharing time of rural/micro finance specialists located elsewhere in the Bank;
- LCSES will strengthen its participation in the Bank-wide Rural and Micro-Finance Thematic Group, both to benefit from experience in other regions, but also to utilize knowledge sharing nodes to disseminate LAC knowledge;
- Aggressive use of peer review process for ESW and lending, particularly drawing upon expert staff from other areas of Bank (Other LAC and regional SMUs, RDV, FSD, CGAP);

- Strengthened linkages with other donors (IDB, FAO, USAID, GTZ) and universities, such as Ohio State University, working in rural finance in LAC through joint country strategy reviews and workshops with strong client participation;
- Working relationships will be developed with micro and rural finance practitioners operating in LAC including NGOs such as FINCA, Freedom from Hunger, SEEP and ACCION, Intl., cooperative finance organizations such as WOCCU and Desjardins, technical assistance providers such as IPC and MicroRate, and successful rural microfinance programs such as CALPIA in El Salvador and village banks to ensure that clients access the best possible technical assistance and that our strategic activities reflect the most up-to-date experiences on the ground;
- Commissioning a review of rural finance in LAC to have a better idea of what our clients want/expect, identify what is working (particularly rural product development) in the region (other than World Bank-supported activities) and why these experiences haven't spread further.

Opportunistic – Ensuring that we respond to client demand. The application of the strategy in any country will reflect the opportunities available in that country rather than impose a blueprint approach on all LAC countries. Accordingly, the proposed strategy does not insist on a specific sequencing or prioritization of the various activities. Experience in the region has demonstrated that results on the ground depend less on the sequencing of activities than taking advantage of the specific opportunities available in each country, with “opportunity” best characterized as local commitment to development of sustainable, rural financial services. Accordingly, the strategy promotes an opportunistic approach which while intending to address the same range of issues through similar activities, accepts that there will be different “points of entry” for strategy implementation. In order to ensure that our rural finance activities are selective and reflect the best available opportunities in each country, identification and selection of activities will focus on:

- Close collaboration with CMUs, other SMUs (particularly LCSFP), IFC, LCSES rural development staff and in-country contacts for identification of potential country counterparts;
- Placing responsibility for development and implementation of activities clearly with country counterparts, with all risks that this entails¹²³;
- Introduction of cost sharing with counterparts at early phase;
- Agreement at outset with counterparts on indicators for monitoring progress and evaluating performance;
- Explicit definition of an exit strategy in case milestones are not met or client commitment wanes.

Operational – Ensuring focus on activities which the Bank can support. The strategy must generate actionable activities which can be supported through the Bank's wide variety of instruments, including sector studies, IDF grants, sectoral and specific investment loans, and financial intermediary loans. In order to ensure that we identify activities which we are in a position to actively support:

- Allocation of funding will be connected to standard Bank cost codes;
- All tasks will have task managers accountable for well-defined outputs;
- The use of LILs and small, project components¹²⁴ will be expanded to fund technical assistance during initial phases of activities to test client commitment as well as technical approach;
- Financial intermediary loans will be considered when macroeconomic, financial sector and real sector policies are generally supportive, to finance expansion of promising institutions through apex-type operations, or when viable, to single institutions, based on high-quality capacity assessments and according to strict performance criteria¹²⁵;
- Bank's direct involvement will be limited to areas of comparative advantage (general policy, financing, information exchange, evaluation) with extensive collaboration with external practitioners for technical assistance.

Monitorable – Ensuring that activities generate results on the ground. The impact of these actions in terms of improving the accessibility, quality and sustainability of financial services in rural areas can be measured by corresponding indicators. This measurement will form a key aspect of the development, implementation and evaluation of the activities. Indicators will be monitored in each LAC country in which the strategy is implemented to measure progress in achieving the strategy objectives. In order to develop a monitoring framework, in countries identified for assistance we will:

- Include in standard poverty surveys such as LSMS, modules to document supply and demand characteristics in rural areas for formal and informal financial services in regions of interest;
- On a more limited basis, due to cost and time constraints, carry out specialized surveys as part of rural project preparation or implementation;
- Carry out assessments of the financial and operational performance of financial institutions operating in rural areas;
- Develop the monitoring framework at an early stage of any intervention, and incorporate monitoring activities throughout implementation.

As the objective of the strategy is to improve the access of low-income, rural inhabitants to sustainable financial services which meet their needs, indicators will focus on:

- Access: average distance to formal financial service provider or % of rural population within x kilometers of a service post (i.e.: bank, NBF, ATM, etc.);
- Sustainability: Financial viability of intermediaries (i.e.: SDI or AROA) and/or regulated and supervised or not;
- Quality: Products appropriate for low-income clients (i.e.: mean and distribution of savings and loan balances and the size of payments transactions).

Replicable –Ensuring that Bank support is leveraged. The approach developed in a specific country context should be potentially replicable at least within that country, and ideally more generally within LAC. In order to leverage Bank support for improved rural finance more widely:

- Activities supported in each country should address identified general constraints, even when activities are focused on specific regions or institutions;
- Monitoring and evaluation activities should involve a broader set of stakeholders in the client country than those directly involved in implementation;
- Mechanisms for dissemination of results and lessons learned should be incorporated in the activity.

Putting the strategy into practice – examples. The following examples of rural financial development activities in Brazil and Mexico illustrate how this strategy is already being put into practice in LAC countries. The examples also illustrate that by utilizing distinct “points of entry”, the strategy can respond to the specific relationships which the Bank has in each country and the opportunities available to achieve results on the ground.

Brazil: Building Institutional Capacity While Demonstrating a Sustainable Alternative. In Brazil, the Bank has taken advantage of the opportunity to develop a “best practice” microfinance platform which can support extension of sustainable financial services in the poorest region of the country while demonstrating an alternative approach to microfinance development.

- *Dynamic:* The task team drew upon specialists throughout the Bank (RDV, CGAP, FSD) for both client orientation as well as intensive peer review during loan processing. International practitioners (ACCION, Intl.) and specialists (MicroRate) were consulted throughout the process to draw upon their experience in developing and assessing microfinance programs.
- *Opportunistic:* Bank assistance resulted from the need to link beneficiary communities to financial services to support the sustainability of investments undertaken throughout the Northeast Region through the Bank supported Northeast Rural Development Program. In the absence of existing, sustainable financial service providers operating throughout the region, the Bank discussed the issue with public and private financial institutions. In the case of the public *Banco do Nordeste*, the president indicated the strong interest of his institution, based on its regional development mission, to develop a mechanism to reach the poor more effectively than their existing, subsidized credit lines. The Bank agreed with the *Banco do Nordeste* on the criteria for development of a sustainable microfinance program. Following an institutional assessment of the *Banco do Nordeste*, including its branch coverage in the Northeast, human resources, and information systems, the Bank provided financing for development of its microfinance program, *CrediAmigo*. This assistance was conditioned on achievement of benchmarks consistent with international best practices. As it consolidates its operational mechanisms with traditional microfinance, *Crediamigo* intends to increasingly orient its product development towards rural areas, taking advantage of its existing operational base in many secondary, agricultural market towns.

- *Operational:* Bank assistance during program development was provided through reallocation of an existing loan, and then through a Japanese PHRD grant. Based on satisfactory progress in terms of outreach and portfolio quality, the Bank approved a US\$50 million loan in June 2000 to support the program's expansion throughout the Northeast. In addition to financing, direct assistance was limited to: (i) the initial orientation of the client to best practices, including financing and assistance for organization of study tours to microfinance institutions in Latin America and Asia; (ii) the financing and selection criteria for international technical assistance; and (iii) independent assessment of program design and implementation results. Additional technical assistance was provided directly by CGAP.

Monitorable: The program includes a number of development impact indicators consistent with the overall LAC strategy. The status of the project to support the *CrediAmigo* program after less than one year of implementation (actual vs. target):

- -Access: 55,000 active clients vs. 150,000; 81 vs. 150 municipalities served by program;
- - Sustainability: Portfolio at risk 30 days less than 2.7% vs. maximum of 3%; SDI of 10% vs. -10%, and institutional development towards an independent, supervised institution;
- - Quality: Average loan size of US\$254 or equivalent to 20% of per capita GDP in Northeast Region vs. maximum of 65%.

Replicable: Although Bank assistance has focused on the Banco do Nordeste, the impact has been much wider in Brazil. The program is demonstrating the viability of profitably massifying microfinance services through a commercial bank, an approach which contrasts with Brazil's traditional emphasis on NGO-based programs. As a result, the Central Bank is reviewing reform of existing regulatory restrictions identified through the *CrediAmigo* program which will be of general benefit to formal financial institutions in Brazil which wish to enter the microfinance market, a process which may be supported under the proposed FSAL to Brazil. In order to ensure broad dissemination of these results, Bank ESW has documented the *CrediAmigo* experience¹²⁶, and it has been agreed that the annual due diligence review of the program will include representatives of the Government of Brazil, IFC and other lenders to the program. *CrediAmigo* will also publish an annual report and is already entering into agreements to provide training services to interested institutions in other regions of Brazil.¹²⁷

Mexico: Focus on Strengthening Existing Institutions. In Mexico, the Bank is supporting strengthening of the regulatory and supervisory framework for non-bank financial institutions (NBFIs), while providing the mechanism for these institutions to improve their financial and operational performance as well as introduce new outreach mechanisms and products for poor, rural areas.

- *Dynamic:* The Bank has extensive experience supporting rural finance development in Mexico. Recent experience has demonstrated the reluctance of private banks to operate in low-income, rural areas, even with some initial subsidies.¹²⁸ As a result, the current approach focuses on NBFIs already present in or near underserved, rural regions. The approach also recognizes that savings services can benefit a much larger proportion of the rural population and therefore focuses on both regulatory reform to improve the security of savings in NBFIs as well as promoting savings activities at the community level. In terms of the provision of technical assistance, the proposed approach draws upon the Bank's experience in support of NBFIs in Africa, and successful, non-Bank financed, technical assistance activities (Desjardins and Accion, Intl.) which have been recently carried out in Mexico.
- *Opportunistic:* The current activities respond to the need to develop sustainable financial mechanisms in rural communities served by the Rural Development in Marginal Areas Program (RDMAP).¹²⁹ ESW was carried out to better understand the demand and supply characteristics for financial services in the Oaxaca and Huesteca regions of Mexico, assess existing financial service providers, and identify mechanisms to better link rural communities to formal financial service providers.¹³⁰ The results demonstrated significant potential demand for these services as well as identifying several NBFIs active in these regions. The institutional assessments revealed a great deal of variability in terms of financial strength, outreach capacity and product design.
- *Operational:* Based on its long-term relationship, the Bank has been providing advisory services to inform the debate surrounding new legislation which would subject NBFIs to stronger regulatory and supervisory oversight. Through RDMAP, the Bank has also supported technical assistance to develop social intermediation capacity in support of savings mobilization in rural communities participating in the project. A proposed LIL will finance technical assistance through an apex-type arrangement to strengthen qualifying NBFIs, consistent with the new legislation as well as introducing microfinance technology and new product development to

reduce the costs of financial intermediation with relatively isolated rural communities. The LIL will also strengthen social intermediation support in the project areas. Preparation of the LIL involves both international and Mexican microfinance practitioners.

- *Monitorable:* The monitoring framework for the proposed LIL is being developed based on the results of the ESW as well as specific studies being carried out as part of preparation. Indicators of community savings mobilization have been developed in conjunction with the social intermediation activities being implemented under RDMP.
- *Replicable:* In order to ensure wide dissemination of results and lessons learned, stakeholder from various areas of government as well as financial service provider associations and NGOs will be involved in review and evaluation of program results. In addition, the participatory mechanisms of RDMP will be utilized to disseminate the results to beneficiary communities.

Table A7.1 Summary of actions to be carried out under the strategy

Objective: Improve access of the rural poor to sustainable financial services which meet their needs

<i>Constraint</i>	<i>Activities</i>	<i>Lead Change Agents</i>	<i>Bank Instruments</i>	<i>Implementation Experience</i>	<i>Expected Results on the Ground</i>
General Financial Sector Development Activities with Rural Impact					
Insufficient knowledge of country financial sector	1. Financial Sector Assessment Identification of constraints to financial market development	LCSFP	ESW, SIL	All	Identification of key constraints to improved functioning of overall financial market.
<i>Market Structure:</i> Barriers to entry result in oligopolistic formal financial sector reducing interest and ability of service providers to expand to rural and low income regions and communities.	2. Financial Sector Reform	LCSFP	ESW, FSAL	All	Expansion of retail services by private financial institutions in rural areas
<i>Market Structure:</i> Subsidies to public banks and credit lines crowd out private financial service providers and incur high fiscal costs.	Permit increased entry of foreign banks directly or through partial ownership	LCSFP	ESW, FSAL	All	Ibid
<i>Market Structure:</i> Institutions operating in rural areas have weak management and dubious financial strength, putting savers at-risk and limiting capacity to expand service area and products.	Public bank/credit line reform Regulation/supervision extended to deposit-taking NBFIs	LCSFP, LCSES	ESW, FSAL, IDF	Bolivia, El Salvador, Mexico	Improved financial condition of NBFIs operating in rural areas
<i>Transactions Costs:</i> Land only effective collateral for lending limiting access to credit of smallholders, those without title, input suppliers and marketing intermediaries.	3. Commercial Code Reform of secured transactions framework including definition of collateral, registry reform and collateral repossession	LCSFP, LCSES	ESW, FSAL, SIL, IDF	Argentina, Bolivia, El Salvador, Guatemala, Honduras, Mexico, Uruguay	Increased borrowing against non-real estate collateral Expanded financing and reduced cost of credit through suppliers, marketers, etc. Increased use of warehouse receipts for financing

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<i>Transactions Costs:</i> Informality of rural enterprise and use of non-bank suppliers of financial services limits ability of rural inhabitants to develop credit histories which can be used to reduce transactions costs of providing credit.	4. Information Systems Credit registry regulations modified to improve access and expand coverage to wider array of financial transactions	LCSFP	ESW, FSAL, IDF	Argentina, Brazil, Nicaragua	Development of credit registries with history of broad range of financial transactions Development of credit scoring models for rural borrowers based on broad range of financial transactions
Rural-Focused Activities					
<i>Market Structure:</i> Insufficient knowledge of actual sources and uses of financial services in rural areas to inform policy and design of interventions.	5. Rural Financial Market Assessment	LCSES, LCSPR, LCSHD	ESW, SIL	El Salvador, Honduras, Mexico, Nicaragua	Baseline of status of access to formal and informal services, financial products
<i>Market Structure:</i> Little information on non-bank financial service providers operating in rural areas in order to inform strengthening activities including regulatory and supervisory reforms.	Survey and analysis of rural financial markets in areas of interest Evaluation of financial service institutions in rural areas	LCSES; LCSPR	ESW, FSAP; SIL	Argentina, Bolivia, El Salvador, Mexico	Identification of rural financial institutions with actual and potential sustainability, costs of product delivery
<i>Transactions Costs:</i> Existing institutions reluctant to move alone to introduce transactions –cost reducing technology and products given lack of knowledge of sources and public good nature of results.	6. Delivery systems and products	LCSES	SIL (TA only), FIL	Brazil, Mexico, Nicaragua	Financially strengthened institutions
<i>Transactions Costs:</i> Poor, rural communities require additional knowledge to leverage social capital to reduce transactions costs of linking to formal financial intermediaries.	TA/funds to institutions to develop microfinance technology and rural financial products Social intermediation at community level		SIL		Increased presence of formal institutions in rural areas Increase in number of low-income, rural clients Increase in products developed to address rural and particularly low-income/small

Table A7.1 Summary of actions to be carried out under the strategy

Objective: Improve access of the rural poor to sustainable financial services which meet their needs

<i>Constraint</i>	<i>Activities</i>	<i>Lead Change Agents</i>	<i>Bank Instruments</i>	<i>Implementation Experience</i>	<i>Expected Results on the Ground</i>
					business needs Community funds linked to formal financial institutions for provision of financial services to community organizations and individuals
<i>Covariance risk:</i> Lack of instruments to de-link covariance risk management from credit impedes entry of private banks and concentrates rural borrowing with public banks.	7. Risk Management Instruments	LCSES, LCSFP, IFC	ESW, SIL, IDF	Nicaragua, Mexico, Argentina	Reduced role/cost to governments for catastrophes and disasters
<i>Transactions Costs:</i> Lack of access to agricultural price insurance increases vulnerability of low-income households and small businesses in rural areas.	Information systems and pilots of weather index-based insurance				Separation of insurance and credit functions between lenders and insurers (though may retail together) Broader use of insurance by smaller, rural businesses
	Development of retail products for agricultural price futures	LCSES, IFC	ESW, SIL, IDF	Argentina	
<i>Transactions Costs:</i> High transactions costs of establishing credible cash flow for lending to low income clients and households limits their access to formal credit.	8. Information systems	LCSES, IFC	SIL, IDF	El Salvador, Mexico	Commercial banks use scoring models based at least in part on local production data to reduce costs of assessing credit risk.
	Data bases with production and price information over small areas developed and made accessible to private sector				
<i>Transactions Costs/Covariance Risk:</i> Lack of secure tenure and title limits ability to use land as guarantee for loans.	9. Land Titling	LCSES	ESW, SIL	Costa Rica, El Salvador, Guatemala, Honduras,	Small businesses and low income households in rural areas able to pledge land at similar discount as larger

Table A7.1 Summary of actions to be carried out under the strategy

Objective: Improve access of the rural poor to sustainable financial services which meet their needs

<i>Constraint</i>	<i>Activities</i>	<i>Lead Change Agents</i>	<i>Bank Instruments</i>	<i>Implementation Experience</i>	<i>Expected Results on the Ground</i>
	Introduce lower cost titling procedures and technology; Improve information quality and access in land registries.	LCSES		Mexico, Nicaragua, Panama, Peru, Venezuela ibid	borrowers.
<i>Transactions Costs: Pledge of stocks as guarantee for borrowing limited by inability to describe those stocks contractually.</i>	10. Commercial Code	LCSES	ESW, SIL, IDF	El Salvador	Standards which facilitate use of warehouse receipts and contracting for products traded locally and subregionally.
	Establishment of enforceable quality standards for locally traded agricultural products				

Appendix 8 Natural Resource Management: Selected Issues and Findings

Introduction

This Appendix presents the main issues that were addressed by the natural resources management portfolio (NRM) of LAC during the 1990-1999. It also presents the case of Bank forestry operations to illustrate important NRM issues.¹³¹

The portfolio of projects and analytical work was substantial, totaling US \$3.56 billion or 47 percent of the total commitments of the LCSES portfolio of US 7.61 billion. It was also substantial given the range of activities, and the fundamental nature of the changes they were seeking. Indeed, the projects amounted to a paradigm shift. The projects fall in roughly three categories. They are those that:

- explicitly address the dual objectives of natural resource management and of improving rural well-being. Important examples are land management, and irrigation projects.
- implicitly address these dual objectives but for which a NRM objective dominates. Important examples are pilot projects assisting indigenous peoples.
- address only the objective of NRM. Important examples are projects in water resources management, and in building conservation and environmental frameworks.

The focus of the review is whether the portfolio succeeded in mainstreaming conservation issues into the agricultural/rural development agenda; and whether the projects have been generating sustainable NRM practices. The question is what can we learn from the experiences gained through the NRM portfolio. This review considers projects, sector operations, and analytical work, 1990-1999, of the Latin America and Caribbean region (LAC). It is primarily based on task managers' (TMs) views of what works, what does not, and why. Specifically, the focus of the review is: (i) was the NRM portfolio integrated in the mainstream of development issues, in particular, in improving the well-being small farmers, indigenous peoples, and the rural poor in general, and in a strategic way?; and, (ii) what operations or components thereof are sustainable and under what conditions? An operation is sustainable when the forces set in motion by the operation continue to operate as intended without heavy Bank support and supervision.

Size, characteristics and content of NRM portfolio

Size and characteristics of portfolio. This review shows that the NRM portfolio was substantial, both quantitatively and qualitatively. It was primarily funded by Bank loans, although grants from the Global Environmental Facility (GEF) and the Rain Forest Trust Fund (RFTF) also contributed. Activities in Brazil and Mexico dominated the portfolio.

What is NRM about. NRM is essentially concerned with conflict management between short- and long-term interests, among vested interests in the private sector, and between private and social interests. NRM is therefore fundamentally political and a full understanding of the political economy in which the NRM operation is to function is essential for success. Successful NRM also requires a sound understanding of the technical parameters governing the physical resources at hand, and the integration of this understanding in measures to promote the wellbeing of the disadvantaged living in these areas. The Region sought to combine two or more of these dimensions: the socio-political, technical, and developmental dimensions. The Region was bold in embracing such a difficult task. Success requires finding the appropriate balance among these three components. This is a tall order. While much progress has been made in terms of concrete results on the ground and in terms of insights gained, this challenge still remains.

Core analytical components of NRM projects. NRM projects, however listed, consist of a core set of components, referred to as "analytical" because their *raison d'être* follows logically from the objectives and the broad instruments used. The basic task of any NRM project is twofold. First, it is to set up an incentive framework within which the major stakeholders will want to sustainably manage natural resources (from which they derive their livelihood) in

the pursuit of their private short-term interests. Second, it is to give them the tools they need to make sustainable resource management feasible or financially advantageous to them in the short term. In other words, the project must set up forces which make them want to, and at the same time make it possible for them, to properly manage natural resources. Sustainability is achieved when this situation persists beyond project years. The analytical components required to accomplish this task are typically:

- a pricing, legal and regulatory framework creating incentives for sustainable resource management among different stakeholders;
- a financing mechanism to give stakeholders as individuals and as groups access to the instruments and tools they need. The mechanism can be a subsidy, a tax rebate, a grant, etc.
- a set of instruments and tools they need to enable them to manage NR sustainably. These consist of software, e.g., management plans, technical training, land titling, technological services, knowledge about lucrative markets to sell to, baseline data and monitoring and evaluation; and hardware, e.g., field, office, and other logistical equipment, maps and manuals, rural roads, farm inputs; and
- an enduring institutional framework which can mobilize the commitment and coordinate the contribution of stakeholders as different interest groups, including both formal—federal, state, provincial, and municipal--institutions at different levels, as well as formal and informal forms of participatory organization at local community levels, with skills for conflict resolution and consensus-building.

Analytical structure of NRM projects. NRM projects are about partnerships between the Bank, other donors, and in-country institutions to change the day-to-day production and consumption behavior of possibly millions of stakeholders. The prime objective of the change is to improve their livelihoods without degrading (or better still, improving) the natural resources they depend on for their livelihood. The partnerships are complex: with all levels of government, and of academia, with private business, and with civil society, (in particular NGOs), local farmers' and indigenous peoples' associations. These day-to-day activities range from land and water management, to tree planting and cutting, and to harvesting non-timber forest products. To get behavioral change on a large scale, and on a permanent basis, among the rural poor, (typically in marginal, remote areas, and among small farmers) is a major challenge given that there are inherent short-term conflicts of interest involved. These are between the:

- **short- and long-term:** short-term needs of the poor for ensuring a livelihood, and long-term necessity for ensuring sustainability of the same natural resource base upon which their livelihood depends. Sometimes there are conflicts among local communities competing for the same resources;
- **private and public:** private necessity for consuming natural resources today, and public (society's) need for environmental services in perpetuity, e.g., carbon sequestration of forests, bio-diversity, controlled soil erosion, and siltation of downstream portions of irrigation and of river systems; and
- **private business and local households:** commercial interests of loggers and other private business to mine the natural resources versus the interests of local households and communities to use the same resources.

Natural resource management is conflict management *par excellence*. To manage these conflicts, NRM projects have tended to operate in three directions. One, they seek to re-orient the pricing, legal and regulatory framework which have an impact on the incentives, and therefore the behavior of millions. Two, they try to strengthen the financial and technical capacities of institutions and stakeholders directly involved in such management. Three, they develop the awareness and organizational ability of stakeholders at local levels.

Issues and Findings

Context and achievements. Many of the operations that make up the Region's NRM portfolio were carried out under difficult country situations, and frequently under the scrutiny of the international community, of both donors and NGOs. Without exaggerating, the Bank was entering a minefield by undertaking NRM activities. The Region's ecosystems are enormous repositories of bio-diversity, but periodic political instability, recurrent financial crises, widespread corruption and poor governance in critical agencies, and other institutional problems bedeviled many Bank operations. The Bank's traditional area of comparative advantage—its technical competence, in particular, with respect to delivering best on-farm and resource management technology, developing land use and resource management plans, worked well under certain conditions. These are where the benefits of NRM could be immediately translated into higher productivity; where the local institutions were sound and well performing; and

where the financing of environmental services for sustainable NRM was assured. But, the Bank had to absorb major setbacks when:

- NRM benefits were mainly externalities and/or of a long-term nature;
- technology to find win-win solutions for both conservation and development was not readily available but had to be developed;
- local leadership and institutions were indifferent, inimical or incompetent; and
- financing was undependable.

Changes amount to a paradigm shift. The Region had to break new grounds in four areas: (a) overall legal, regulatory and incentive frameworks; (b) the technology of sustainable and productive agriculture, in harmony with sustainable natural resource management; (c) the building of institutions and alliances at multiple levels; and in (d) financing mechanisms outside the budget. The paradigm shifted from higher production and incomes today to higher production and incomes today and tomorrow; from production to resource management; from private gains, to private and social gains, from authoritarian to participatory project implementation and leadership. In short, the Bank was promoting a paradigm shift but unfortunately did not do so in a holistic and strategic way in most cases.

Finding win-win solutions for NRM (conservation) and rural wellbeing (development) in projects. The NRM portfolio is a valuable source of learning for practitioners (in rural development) to the extent that it has grappled with finding win-win solutions for both conservation and development, for the heart of the problem is the divergence between the two objectives in the short run. Projects reviewed fall in three categories:

- those that explicitly address the dual objectives of NRM and improving rural well-being (often stated as increasing in small farmer incomes or improving indigenous peoples' standard of living, and reducing poverty);
- those that implicitly address these dual objectives but for which a NRM objective dominates; and
- those which do not address these dual objectives, that is they focus on NRM only.

Structuring incentives is at the heart of sustainable NRM. Finding win-win combinations for conservation and development is at the heart resolving the potential trade-off between sustainable resource management (conservation) and poverty reduction (development). While this may be obvious, finding the right mechanisms to do so is not. To-date, the economy-wide approach of Costa Rica has been the most effective. The government has mainstreamed conservation and development policies by changing the rules of the game at every level, involving private sector and local communities throughout the process.

The case of Costa Rica: mainstreaming conservation at economy-wide and micro levels has been effective. OED argues that the Bank's Forestry Policy Review (1993) had significant impact on Costa Rica's forestry strategy, as Costa Rica had already been wrestling with issues of conservation and development for years.¹³² "Let us move towards a new ecological order of international cooperation" (Calderon Fournier, 1990). Costa Rica's vision of sustainable development changed from an import-substituting, anti-forest approach to one of macro-economic balance, alliance with the environment, participatory democracy, and social investment.¹³³ Within this new vision, the government removed subsidies that were expanding agriculture and ranches at the expense of forests, and over a decade, developed a series of financial incentives (e.g., Certificate for Forest Payment in Advance, Certificate of Forest Management, Payment for Environmental Services).¹³⁴ These payments, extended to lower-income farmers, made it financially possible and profitable to reforest. The Payment for Environmental Services recognized and rewarded owners of forests for externalities. These, together with many other legal, regulatory and institutional measures have made Costa Rica a model for integrating conservation and development. How to transfer this model to other countries is far from obvious however given that Costa Rica is not considered representative of the complex political economy environment prevailing in other LAC countries.

The case of short-term benefits: when NRM is essential to generate these gains. When technology requiring sustainable NRM is sound, and when the benefits generated are short-term, farmers will adopt NRM. The two Land Management (Parana and Santa Catarina) projects of Brazil succeeded in significantly arresting soil erosion, and in increasing yields, productivity, and revenues among small farmers. The adoption of such cultural practices spread well beyond the number of micro-catchments, and small farmers targeted.¹³⁵ Similarly in the Secano project in Chile, where the project developed strategic development plans for eight micro-regions, and assisted the farmers to manage their resources better, higher yields, productivity, and incomes have been achieved without major subsidy. However, in the same Brazil projects, undertaking collective land management where longer-term benefits were

expected was a harder sell, particularly in conservation and commercial re-forestation: financial support from the Soil Conservation Incentives Fund (PROSOLO) was essential.

The case of community forestry: NRM can also be good business. The Mexico Community Forestry project (1997) sought to promote sustainable NRM by increasing the range of forestry-based sources of income to these communities.¹³⁶ The project wanted to demonstrate to local communities and ejidos, that sustainable NRM can also be good business. The project scaled up initiatives mainly by indigenous communities and ejidos with significant forestry resources. It assisted these communities develop successful economic enterprises through incentives to sustainably manage their NR base, thus demonstrating that NRM can be good business. The project provided a range of technical and capacity-building services to about 310 participating communities, piloting a technical assistance fund. This fund channeled government funds for management plans, and related studies as payment for environmental services, and an environmental investment to support local NRM in initiatives. The TA included integrated forestry management plans, concrete extension advice on commercial production, studies on community conservation, possibilities of eco-tourism, etc. A mid-term evaluation shows very positive results. See section below on forestry.

The Extractive Reserves Pilot Project in Brazil: can traditional technologies also be profitable?¹³⁷ The focus of the project was conservation but it also sought to promote environmentally-benign but profitable methods of improving livelihoods and generating incomes for the populations in these reserves. It moved on three fronts. First, it improved subsistence-type activities like agro-forestry, processing forest products for local sale, bee keeping, and domestic animal production. This component is believed to be sustainable because these activities are fairly simple. Second, it financed sub-projects testing and disseminating environmentally-friendly approaches to adding value to traditional occupations such as tapping rubber and gathering nuts. For example, a new product called “vegetable leather” from rubber has been produced. This component fared poorly as the products were constrained by poor prices and markets. Third, it financed research in new income earning alternatives, such as eco-tourism, and extracting exotic fruits, fragrances and oils. There has been modest success on this front. So far however, there is no compelling evidence that these various efforts constitute a breakthrough in achieving both conservation and poverty reduction.¹³⁸ This is not to say that there have not been improvements in the well-being of the peoples living in the project area. It is to say however, that so far at least, expectations of dramatic improvements through traditional technologies for non-timber products are unfounded. We have not found or there is no the “magic bullet”.

The case of longer-term benefits: structuring incentives remains problematic. In cases where the benefits require collective action and are much longer-term, as in the case of watershed management and forestry, structuring incentives remains problematic. One example is the experience of Brazil in the small-holder reforestation component: Minas Gerais Forestry Development Project (1987-1996).¹³⁹ Farmers were keen on planting eucalyptus trees, which are faster growing trees with a ready market; but not keen on planting native species, which were slower growing, and for which financial returns were lower. To motivate farmers for these latter, the project had to step up a promotion campaign, and refocus its efforts on areas that had become particularly degraded. This sub-component also needed the additional support of municipal governments, NGOs, and producer associations. The financial returns from the reforestation itself were insufficient incentives. In the case of the Natural Resources Management Project in Colombia, grants had to finance 70 percent of the cost of rehabilitating the watersheds. In this difficult case of longer-term benefits, experience to date suggests that it may be unrealistic to expect immediate users to have the incentive to pay (even if they had the means, which often they do not) and shoulder the lion share of the costs. One has to tax the whole of society to pay for these services.

The critical importance of financing environmental services. The tension between the short- and the long-term is acute with respect to financing. Although nobody disputes that in the long term, poverty reduction (development) depends on sustainable resource management (conservation), the difficulty is in the short run. The trade-offs can be sharp. Given so many pressing demands on natural resources, the basic question for any NRM project is: who pays for the environmental services of well-managed natural resources? The economist’s answer is society for the beneficiaries of the environmental services go well beyond—both in space and time—the immediate users of these natural resources. In analyzing the problem of externalities, the web of costs and benefits can be complex, but they are simple in comparison to the design and implementation of actual taxation and subsidization schemes.¹⁴⁰ All NRM projects have had to grapple with this daunting challenge.

Public financing of NRM activities has been the battleground among sharply divided interests. A recurrent problem of NRM projects has been the shortage of counterpart financing. Though not unique to NRM projects, this

factor marred the implementation and effectiveness of many projects. Counterpart financing is an important subset of the broader mechanism for financing environmental services. In many cases, e.g., Mexico, Brazil, the immediate cause of the problem was the financial crisis the country was undergoing. A more fundamental cause was the inability of NRM lobbies to compete successfully against the many pressing demands on the government budget. This, in turn, reflected the priority-setting processes of the body politic, with its many factions and competing vested interests. In fact, shortage of counterpart financing can be viewed as a tug-o-war between political and technocratic forces, and/or between strong political/economic interests and weaker constituencies. This tug-o-war is inevitable in NRM.

Engineering mechanisms to pay for environmental services is critical. What worked in the above cases (except for some components of Extractive Reserves, and for the slower growing native tree species) is that sustainable NRM paid off in the short run: the gap between private and social interests was substantially closed. When there is no market whereby owners of these natural resources can capture the social benefits of conservation and bio-diversity, society at large must pay. Concretely, mechanisms, in addition to budgetary allocations, need to be worked out/drawn upon to finance these environmental services, e.g., endowment fund, matching grant, cost recovery, “polluter pays principle”, licenses.¹⁴¹ For example, the restructured Mexico Protected Areas project (1997) developed a Fund for Natural Protected Areas (FANP) for financing the conservation work in ten protected areas. The Fund was initially funded by grants. The interest earned by this professionally managed Fund finances basic operational costs, and conservation projects. This Fund has provided much needed stability in funding project activities, and has worked well. Such stability is invaluable in contexts of recurrent fiscal constraints. Good governance, and an adequate balance of power between public and private sector in the management of such a fund are essential if it is to fulfill this central role. The case of the first Mexico Environment Project (1992) and of many other projects, in which financing was a chronic problem (“a nightmare”), emphasizes the critical importance of securing a dependable financing mechanism.¹⁴² At the end of the day, if there is no lucrative market to internalize the value of the environmental services, some form of grant funding will be necessary to close the gap.

How best to mainstream NRM in the development agenda remains an open question. There are significantly different views on how best to mainstream NRM in development, and the role of sector work to achieve this objective. TMs point to three sets of considerations. One is the mixed experience on the importance of sector work and sector operations. Two, more fundamental sector work is sorely needed as in the case of the water resources management sector as our clients value our know-how and worldwide experience more than our money. Three, is the inability on being definitive on any particular approach given the long gestation periods needed to build and anchor broad consensus, and to institute new ways of managing resources at all levels.

Timely disbursements and good development work are not the same thing: the case of WRM projects. The Bank itself is caught between structuring staff incentives for short term results, measured by timely disbursements; and structuring incentives for longer-term development impact, measured by promoting multi-dimensional structural changes in the way communities and countries manage their natural resources. While everyone agrees that disbursements are means not ends, they are easier to measure and are of determining importance on the Bank’s financial bottom line. Their importance therefore cannot and should not be ignored. Measuring multi-faceted development impact is inherently a much more difficult task.¹⁴³ This dilemma between the Bank’s short-term financial and long-term developmental interests (indeed the *raison d’être* for the Bank!) is well exemplified by experiences in WRM. (The dilemma is also shared by other sub-sectors in varying degrees).

The case of integrated water resource management. The fundamental principles of the Bank’s 1993 WRMP run counter to age-old beliefs and practices. Water is an economic good, and its delivery must be paid for. The traditional view is that water is a gift from god, no distinction being made between the resource and the service—the cost of delivering it, at the right time, place, volume and quality. Water is a unitary resource and its management must be holistic, and undertaken at the lowest appropriate level. Traditional practices are that water management is fragmented within basins, and among agencies; and is highly centralized.

The tension between short-term exigencies and long-term benefits. Anchoring these principles in the real world is bound to be a long term and controversial process—not in five years, but in decades! The United States started the process since the 1870s! Water markets were introduced in the 1930s! Essentially, the entire landscape has to be changed. Just on the software: changes include laws and regulation; the mind set of agencies and communities; the financing mechanisms; technical training at all levels; the organization of Water Users’ Associations (WUA) and their interactions with government agencies and with each other. Moreover, modern WRM requires consensus based on fair and efficient rules of the game from users’ levels up. This is a tall order. Given the complexity of the

tasks, substantial progress has been achieved, e.g., in Mexico and Brazil.¹⁴⁴ The complexities of the tasks in the difficult environment of budget cuts played havoc on disbursement schedules! For example, even for a project that is not 100 percent institutional, delays were substantial. The closing date of the Mexico: Irrigation Sector Project (1992) had to be extended from December 31, 1995 to June 30, 2000. The project substantially achieved its ambitious institutional objectives but took much longer than planned initially.¹⁴⁵ The lesson is really a question: how should the Bank harmonize its need for timely disbursements with its duty for addressing difficult, time-consuming development issues? Do institutional incentives encourage grappling with the difficult issues? The participants of the Brasilia workshop of early 1999 warned the Region of the serious danger of “a portfolio of ‘well-performing projects’ which do not address the critical, difficult, development issues and thus have limited impact.”

An important component of NRM: the case of forestry operations in the Bank illustrates many of the issues raised above.

The case of short- and long-term, private and social benefits of forestry. Some 38 percent of Latin America is currently covered by forests (down from an original forest cover of about 60%), totaling just over 901 million hectares of forest area. This accounts for some 24 percent of the world’s forest area and more than 50 percent of all the world’s tropical forests. These forest resources play a major role in sustainable economic growth (wood demand in LAC is rapidly growing and most products are consumed domestically) and poverty reduction. They also provide ecosystem services (e.g., water supply and quality, watershed stabilization, carbon sequestration, biodiversity conservation and landscape amenities for eco-tourism).

The economic and social cost of deforestation. The full economic cost of forest loss and degradation is likely to be very high in many of the Bank’s client countries. Deforestation in Latin America represents some 40 percent of the world’s total (5.8 million ha/yr). This is a major source of greenhouse gas emissions and often leads to natural disasters (witness the landslides in Venezuela and Honduras) that perpetuate poverty and misery. Inadequate and inappropriate approaches to forests in the LAC region, and to other activities that have an impact on forests, undermine the fundamental Bank objectives of poverty alleviation and sustainable economic growth.

Forestry and poverty reduction especially among indigenous peoples. Forests are especially important to the rural poor, both in the LAC region and globally. The forty million indigenous people in LAC are concentrated in forested areas and a high proportion of the other rural poor reside in these areas. Many people living on less than \$1 per day are significantly dependent on forests for their livelihood and that forests must be a critical element in any realistic strategy to alleviate poverty in some of our major client countries. This is particularly the case as new, environmental markets and non-traditional forest product markets emerge. Forest development contributes to reducing poverty via opportunities to generate employment, support survival, generate goods and services, improve the quality of life, maintain bio-diversity and culture, mitigate natural disasters, generate income, provide alimentary security and allow for alternative production instead of illegal cultivation, among others.

Despite these positive benefits, forestry development has lost ground at the Bank. There has been a decline in LAC lending in the sector (with the notable exception of the increase in GEF funding). AAA (analytical and advisory services) has also declined in the sector since the publication of the 1991 Forest Policy Paper. At the same time, there has been an increase in structural adjustment programs, which have paid little attention to national and global natural resources issues: a potentially dangerous approach, in view of the importance of forest ecosystems as outlined earlier. Moreover, quick disbursing adjustment loans have limited scope for addressing the comprehensive reforms needed in the forest sector. There is, however, considerable potential for the adjustment instrument to be used to *initiate* major forest sector policy reform and development, and thereby stimulate a programmatic approach to the sector: following up structural adjustment with more specific sector adjustment and investment options as needed. This would require, however, much stronger coordination between adjustment programs and sectoral operations to ensure that phasing and integration of objectives is achieved.

Sustainable economic growth requires attention to forests. The potential of forests in improving the livelihood of rural people must be viewed in the larger context of sustainable rural development. In particular, the Bank should focus on enhancing the value of forest resources through various interventions. These include the following: mobilize the potential of forest resources to contribute to poverty reduction; increase protection of biodiversity and the production of other environmental services of forests; and enhance and sustain the productivity of forest resources. In addition, they develop alternative, non-consumptive economic uses of forest land, and contribute toward implementing the policies necessary for sustainable economic growth and trade. The interventions would have these objectives:

Harnessing the potential of forests to reduce poverty

- Promoting policy, institutional, and legal frameworks to ensure that the rights of indigenous forest-dependent peoples and communities are protected.
- Empowering poor and marginalized groups in society to take a more active role in formulating and implementing rural forest policies and programs.
- Supporting tenure security and collaborative forest management, so that local communities may manage and benefit directly from their own resources and the marketing of their forest products;
- Working with local groups and governments, NGOs, and other partners to integrate forest, agro-forestry, restoration of secondary forests and small enterprise activities into rural development strategies with special reference to their potential to contribute to sustainable improvements in livelihood.
- Integrating Forests into Sustainable Economic Development:
- Analyzing and coordinating policies and projects to ensure a cross-sectoral approach to planning and implementation of sustainable forest management, and forest conservation and development. In this context, the Bank should emphasize the achievement of its WWF-WB Alliance targets for forest management and conservation.
- Supporting improved governance through reform of inappropriate timber concession and subsidy policies.
- Containing illegal activities and corruption through improved forest law enforcement and independent, institutional oversight.
- Addressing finance, fiscal, and trade issues related to the forest sector and forest products, to allow governments to capture a higher portion of forest revenues for economic development.
- Promoting catalytic investments in sustainable harvesting and forest management, but only in situations that will be or have been independently verified or certified.

Protecting global and local forest values

- Helping to build markets for international public goods, such as carbon sequestration (i.e., once the Kyoto Protocol is ratified and it is agreed that sequestration is included in the CDM) and bio-diversity (bio-prospecting).
- Assisting governments in designing, implementing, and financing national and local markets for environmental services provided by forests, such as stable water supply and quality, risk and disaster vulnerability management (landsliding and fires), biodiversity and habitat (conservation, branding) and landscape amenities (to support eco-tourism and recreation).
- Assisting governments in strengthening forest and investment policies, to ensure that the indirect and cross-sectoral impacts of policy and investments on conservation value and protection areas are minimized.
- Assuring that Bank sectoral and cross-sectoral investments and programs do no direct or indirect harm to high conservation value forest areas, as defined through local and national processes of consultations.

Three of the more mature Bank projects—in Mexico, Argentina and Brazil—are described below as good examples of this kind of work in the region.

Mexico

- Mexico's unique land tenure system designates that a large portion of the country is organized communally in land reform blocks, *ejidos*, and/or indigenous communities. Some 70 percent of Mexico's forests and wildlands are included in these *ejidos* and community areas. The rural population depends on these resources for timber, fuelwood, small livestock pasturage, medicinal plants, a variety of foodstuffs, construction materials, and domestic products. Indigenous communities place high cultural value on their forest areas and many religious rituals revolve around the forests. In 1995 the Bank assisted the Government of Mexico to undertake a Resource Conservation and Forest Sector Review and associated consultative process with local communities and other stakeholders. This initiative recognized win-win combinations to reduce poverty and to help stem the high rate of deforestation (some 50 percent of the forests have disappeared over the last five decades), as well as to formulate a more comprehensive strategy in light of the emerging NAFTA treaty.

- From that Review, the Community Forestry Project (LN4137-ME) was designed to: (a) pilot improved natural resource management and conservation by indigenous community and *ejido* forestry resource owners; and (b) increase the range of forestry-based income generating options available to them in pilot sites. Specific activities included the following. First, strengthen the capacity of communities and *ejidos* to manage their forest resource base. Second, strengthen the capacity of the private sector to provide forestry services to communities and *ejidos*. Third, design strategies to promote timber, non-timber, and non-traditional products from community and *ejido* forests. Fourth, strengthen the federal and state institutions working in forestry conservation and development.
- At the time of the project's Mid-Term Review (November 2000), it was found that, from the perspective of social development, the project has contributed to develop a relationship of trust between government institutions and beneficiaries. In the pilot state of Oaxaca alone, the project has contributed to consolidate internal organization and strengthened participation in sectoral discourse in more than 220 communities and *ejidos*. It did so through the organization of more than 150 *fora* and 54 community-to-community seminars, the participation in 305 Community Assemblies, and the development of 54 rural appraisals. Also, there were training, technical assistance and land use planning tools which enabled more than 250 community strengthen their knowledge base and capacities to develop strategies for multiple resource use, economic development and conservation, including the access to new market opportunities.
- There has also been a significant impact on forest productivity. Important indicators are improved management of 166,000 hectares, land-use planning for 117,000 hectares of non-commercial forest, 13,700 hectares put under conservation, 75,000 hectares certified according to global standards, increased economic activity generating 1500 permanent new jobs, US\$ 11 million of increased roundwood sales, and 17 non-timber pilot enterprises. Through training, the project has also increased the *ejido* capacity to manage the forests as well as ensure the availability of qualified private service providers and forestry professionals.

Argentina

In 1993, the Bank helped Argentina prepare a Forestry Sector Review (Report No. 11833-AR), which highlighted the opportunities for sustainable development and identified the obstacles to the sustainable development of the forestry sector. To help address these issues, the Bank is now financing two projects: the Forestry Development Project (Ln3948-AR) and the Native Forests and Protected Areas Project (Ln4085-AR). With these projects, the Bank has been providing broad-based support to the GOA in its efforts to foster sustainable growth of plantation forestry and to improve the conservation and management of natural forests. Though modest in size, these projects are having a profound effect on the sector. Far-reaching policy and institutional reforms are being introduced. Essential information gaps are being filled. Agreement is being obtained on the driving forces underlying deforestation. Consensus is being reached on priorities *vis-a-vis* the conservation and management of natural forests, and means and ways of successfully involving small farmers in natural forests management and tree planting are being identified and tested as a way to alleviate rural poverty.

The positive impact has been a sharpening of political and public interest in forest conservation. Also, small farmers are showing strong interest in forest and plantation management, that NGOs are generally supportive of (and involved in) the program, and that there has been a 100 percent increase in plantation establishment over the last four years.

In line with the experience gained with the ongoing projects, this program could be scaled up with an aim to improve forest and bio-diversity conservation and diversify economic growth and poverty alleviation in rural areas. As such, more emphasis would be placed on: decentralization, environmental conservation initiatives at the local level, increasing the involvement of the private sector in service delivery and increasing the role which forestry can play in reducing rural poverty. This could be done by through various means. One, address the main institutional (public and private), policy and regulatory issues that continue to impede the conservation of native forests and limit investments in sustainable small- and medium- scale forest plantations. Two, help local governments, municipal authorities, communities, local interest groups and small farmers to conserve and manage native forests. Three, assist small- and medium- scale investors to produce and process plantation wood. Four, support small producers with forestry start-up activities. Five, expand the availability of improved planting stock and forest product marketing information. Six, make available certified technical assistance in forestry from private sector sources. Six, reduce the risks that wildfires pose to investments and to the environment.

Brazil

The Bank has considerable experience with natural resources management, conservation and poverty alleviation in Brazil where it has financed projects in the North East, Parana, Santa Catarina and Minas Gerais. Most of these have included a package of mutually reinforcing interventions aimed at improving small farmer income together with targeted initiatives in support of cost-effective natural resources management and conservation programs in impoverished areas. In the case of Minas Gerais, the Bank financed a Forestry Development Project (Loan 2895-BR), which was successfully completed in 1996. The project was designed to increase wood production, reduce forest degradation, alleviate rural poverty, improve environmental conservation and strengthen the capacity of key institutions. It achieved most of its objectives. It provided 22 million cubic meters of industrial wood. It conserved 159,000 hectares of native forests through product substitution, prohibiting logging in 390,000 hectares of native forest, eliminating fires in and around the newly-created parks. It increased the state's protected areas system by 71 percent, and helping to reform the State Forestry Institute. Environmental protection was greatly improved through the creation of additional protected areas, the creation of eleven environmental education centers, the implementation of environmental education programs and ecological research.

The project contributed to rural poverty reduction by providing around 25,000 person-years of employment (in forestry and eco-tourism) and by diversifying small farmer income through support to farm forestry. It made outstanding progress in three areas. First, it helped reform the State Forestry Institute into a decentralized and user responsive institution. Second, it succeeded in encouraging small farmers to plant trees as a cash crop and for the protection of watercourses. Third, it catalyzed local interest in the creation and management of protected areas and stimulated interest in eco-tourism.

As described in the project's ICR (report No. 16545), this project provided several important lessons for future Bank operations in Brazil and other LAC countries. These included: (i) where wood markets exist, farmers are quick to take up tree planting; (ii) individuals and communities respond positively to conservation planting where the conservation message is clear. In addition, for the public sector, tax retention incentives are a very effective way of getting municipalities to establish protected areas; and for society, community participation is essential to the success of protected area development.

Summing up: key messages

Mainstreaming conservation in development through a holistic approach. Through combining selective interventions at economy-wide and lower levels, a holistic approach can be a powerful way of mainstreaming conservation into development, as in the case of Costa Rica. However, Costa Rican experience may not be transferable given the vastly different conditions in other LAC countries; e.g., they are big countries, with environmentally and socio-politically much more complex systems. While analytical services by the Bank have certainly played a critical role in promoting mainstreaming, they are neither necessary nor sufficient. There is no general rule on how best to develop country-level strategy for mainstreaming. However experience to date strongly suggests revisiting the strategic role that economy- and sector-wide analytical work and operations can play in mainstreaming conservation in development.

Laying foundations of sustainability of NRM through project intervention: what does it take? What does matter in laying foundations of sustainability of NRM through project intervention level is success in pilot operations. Success even on a small scale can spread and promote sustainability. The problems to be solved were predictable, given the political and contentious nature typical of NRM issues, and the chronic financial constraints of implementing agencies. What was unclear was how to solve them. The common themes underlying the solutions that have worked so far are:

- **grant financing has been necessary in all cases**—Integrating sustainable NRM has required grant financing even in cases of short-term benefits. In these “easy” cases, society had to pay less than in the “hard” cases of longer-term benefits. In all cases, sound NRM is not a free good to society. Designing and managing workable financing mechanisms is at the heart of successful NRM.
- **short-term pay-off essential in win-win solutions**—Improving the livelihoods of local communities in environmentally-benign ways, be they indigenous peoples, small farmers or other rural poor can succeed when financial, technological, and organizational mechanisms are jointly wielded to generate short-term financial pay-off. This in turn requires a ready market for the products from environmentally sound production techniques.

- **externally financed grants essential in cases of longer-term benefits**—Developing an externally financed and professionally managed fund has provided adequate, stable financing for several NRM projects. (Too many projects have suffered from chronic shortage of counterpart financing). The fund is external both to the immediate stakeholders—who are either too poor or have insufficient incentives to pay; and to the government budget, which is typically constrained.
- **local community ownership and management essential for sustainable NRM**—NRM has to be decentralized. The cooperation of local communities is essential as only they know enough about local situations to help develop effective improvements in their management practices. Outsiders cannot know enough of these local (and changing) situations to design effective improvements. Their detailed local knowledge, combined with their short-term interest in the sustainability of NR make them essential partners in NRM. In addition, such local ownership has been a stabilizing force in unstable LAC environments. It is no accident that institution building at community levels has been more successful than at higher levels.
- **effective communication nationwide essential for anchoring broad support**—while NRM occurs at local levels, it requires regulatory and financial support at higher levels. Therefore, stakeholders nationwide need to be informed on NRM issues and their importance. Their participation on debates concerning NRM, and their support, financial and otherwise can have a major bearing on government NRM policy in increasingly urbanized and democratic societies. Effective communication at multiple levels is essential.
- **key ingredients of successful NRM operations require time, constancy of purpose, and flexible problem-solving**—quick results should not be expected. Changes sought by NRM are fundamental, complex, and long-term. NRM deals with resources that matter most to people: their land, often their prime source of income. Conflicts need to be resolved. Feasible and fair mechanisms of allocation and cooperation put in place. The standard five year project horizon is typically too short. Too often, it raises expectations that cannot be fulfilled and contributes to unnecessary stress, costly to all involved.

Appendix 9 Best Practices and Strategies for Interventions to Promote Rural Non-farm Employment in Latin America

Introduction

This document reports on the findings of the project “Best practices and strategies for Promoting Non-Farm Employment Creation in Rural Development in Latin America.” This is a project supported by DFID-World Bank and carried out by RIMISP.¹⁴⁶

The objectives of the study are to inform policymakers and project and program designers of best practices and strategies for promoting rural non-farm employment (RNFE), in broad development programs and in projects focused on RNFE.

By “non-farm” we mean the manufactures or services sectors. Note that manufactures include processing of farm products, and services include commerce of farm products, inter alia. Thus, the sectoral categorization of an activity concerns only the nature of the product and the types of factors used in the production process. By “employment” we mean either self-employment or wage-earning employment. That employment can take place anywhere in the rural space: in the domicile, on the farm premises, in a rural town. The definition is not restrictive as to scale (in a huge factory or by a single person), or technology (traditional or modern, capital- or labor- intensive). By “rural” we mean the combined space of the “countryside” and “rur-urban areas” (villages and rural towns; some project/program design includes in the broader rural area the intermediate cities linked closely to surrounding rural areas).

The general approach of our analysis is inferential, as we examine a range of recent field projects and programs, asking several questions, and infer best practices and strategies.

The questions are the following:

- RNFE promotion interventions should fuel overall local economic development. How does the intervention ensure this?
- RNFE promotion interventions should be market-oriented. How does the intervention promote links to market demand?
- RNFE promotion interventions should improve the whole supply chain (from input access, to RNFE production, to marketing and distribution) of the RNFE products. How does the intervention accomplish this?
- RNFE promotion interventions should give rise to continued, market-sustainable development even after the project or program ends. What provisions are taken for this?

We and the team of 28 case study authors (their report titles and names are detailed in the references) and the 950 participants in a broad electronic conference asked these questions of specific projects/programs and in general, and developed the findings reported here. We proceeded as follows.

Six commissioned case study projects/programs were chosen by expert international and national opinion in a workshop in February 2001. The studies were commissioned and national experts chosen. The criteria for selection of the projects/programs were cases where projects appear successful in their operational answers to the four questions above. The final selection included interventions in Brazil, Chile, Honduras, Mexico, and Peru. They were studied in brief field studies in March-May 2001 by two-person teams (a national author and a representative from the RIMISP team). The studies were received and synthesized in June-July.

Eight “competed” case study descriptions of interventions (projects and programs) answering to the above criteria were selected in an open competition (solicited bids) via internet in July/August. 35 documents were received, and the best eight were selected.

The above 14 studies (6 commissioned, 8 competed studies) are described in summary form in Tables 9.1-9.4 in the next section, and more detailed summaries are presented in Appendixes 1 and 2.

The above 14 studies, plus six IFAD project summaries (highlighting RFNE promotion interventions), plus the synthesis of the first six (commissioned) studies, were presented as input to an electronic conference involving more

than 950 participants (among which, professors, policymakers, and practitioners involved in rural development) in September/October 2001. The questions were those posed above.

This document summarizes the operational answers to the above four questions and pinpoints their practical implications for policy, project, and program design to promote RNFE.

The report proceeds as follows. Section 2 summarizes key characteristics of the 14 projects studied. Section 3 lays out findings and illustrations from the projects in response to the four questions noted above. Section 4 summarizes implications. Then two Appendixes present summaries of the interventions studied.

Characteristics of the Interventions Studied

Tables 1 and 2 present the basic characteristics of the interventions studied. While the following cannot be interpreted as a statistical representation of the characteristics of projects in Latin America focusing on RNFE, we believe they are indeed broadly representative. Table A9.1 treats the six commissioned studies, and table A9.2, the eight competed studies. Note that the numerators summed sometimes exceed the denominator because some projects have several activities or funders or implementers or target markets.

First, most of the interventions are “projects”, corresponding roughly to one project, one activity (for instance, cheese-making). Three of the interventions are “programs” that comprise several activities and/or projects. The distinction is of course somewhat artificial.

Second, nearly all the interventions began in the 1990s. Most of the studies did not specify the end-date of the intervention (only two did). This reflects the fact that RNFE projects were less common before the 1990s.

Third, although we cannot say whether the sample of interventions is statistically representative, it is interesting to note that 4/14 of the cases chosen are from Brazil, roughly consistent with the country’s population share in LAC. Peru has another 4/14, due to the density of innovative projects there (perhaps due to its intermediate status in terms of economy and institutional formation). Moreover, most of the interventions are “region” specific (state, department, that is, a subset of the country), but a few are national. Of the regional interventions, roughly half are municipality-specific.

Fourth, 8/14 are focused on food processing. The rest are in nonfood manufacture (5/14) and services (mainly tourism, in 2). This weighting reflects the local communities’ interest in adding value to primary production, and reflects a recognition that processed food is in demand by urban consumers with growing incomes. Hence, about 80% of the interventions focus on manufactures, rather than on services. This is at odds with the composition of RNFE incomes in rural LAC, about 70% of which are in services rather than manufactures (Reardon et al. 2001).

Moreover, nearly all the projects focus on self-employment rather than wage employment in the rural nonfarm sector. Again, this is at odds with the importance of wage employment in the rural nonfarm sector, roughly about half (Reardon et al. 2001).

That the projects are weighted toward manufactures and self-employment and neglect the service sector and wage-employment means that there is room for improvement, and the misalignment is probably due to the current foci of projects reflecting the prevailing biases or conventional wisdom of what “good rural development” should be, where “self-employment in manufacturing” especially if linked to the farmer’s own primary production, is thought to be “better” than “wage employment in the service sector” in terms of improving welfare. In rural development circles, wage labor “smells” of exploitation of workers by abusive employers (an image that can, however, sometimes be the reality). A secondary reason for the foci is that project managers may not be aware of the findings of recent empirical research on the composition of RNFE in Latin America today.

Fifth, most of the interventions target the regional urban market (say, the intermediate city near the rural area they serve); one targets national government procurement, and three target the export market. This weighting reflects the recognition that countryside markets are relatively unpromising target-markets because of low incomes and lack of growth, while regional urban markets comprise richer consumers seeking processed foods, light manufactures, and services such as tourism.

Sixth, nearly all the interventions work with rural economic organizations, such as rural economic organizations and associations. A few deal directly with individual workers or firms. This reflects a recognition that projects save time and money by working with a group due to economies of scale and due to the need for a critical mass for certain

actions such as product labeling, that certain capital goods are non-divisible (such as milk processing plants), that collective planning and action pools knowledge and provides an incentive for change, and that larger groups can more effectively provide a critical mass of product to a market, thus spurring demand and product recognition.

Moreover, most of the food processing projects put special emphasis on working with women entrepreneurs, but there is no gender limitation in any of the projects.

Seventh, 5/14 are implemented by municipal governments, 4/14 by state/regional governments, 5/14 by NGOs, and 3 by national governments. This composition reflects a change (diversification) from the traditional project implemented by foreign donors or national government agencies.

Eighth, the funding sources are similarly diversified: 6/14 by national governments, 7/14 by foreign donors, 3/14 by NGOs/non-profit foundations, and 2 with participation in funding by large/medium private firms. The latter reflects interest in business linkages and sub-contracting.

Ninth, as for differences between the commissioned and the competed interventions, the latter tend to be more related to NGO and municipality involvement, more diversity of approach (with several programs, as compared to projects, included).

Main meta-level actions of the interventions

Tables 3 and 4 present the main actions of the interventions studied. While the following cannot be interpreted as a statistical representation of the main actions of projects in Latin America focusing on RNFE, we believe they are indeed broadly representative of the more successful interventions. Table A9.3 treats the six commissioned studies, and table A9.4, the eight competed studies. The structure of our points follows the structure of the rest of the document, first focusing on meta-level actions (more general actions that are not specific to a level of the supply chain) and then on the levels of the supply chain (to wit, input access, production of RNFE products, and marketing).

With respect to meta-level actions, over-arching the specific levels of the supply chain, several generalities are salient, despite the evident diversity of approach.

First, most of the eight food processing projects focus on RNFE production and marketing, but include actions to increase/improve input access which include improving farm production; this is because quality, safety, or cost of the crop input is important to the marketability of the processed product for reasons of market demand or regulations or both. The other seven interventions have less emphasis on including actions to improve production of inputs to RNFE; the exceptions are tourism projects, which emphasize agro-tourism.

That half of the projects have relatively little focus on improving the production of inputs to the RNF activity (that is, improving farm production for example) is a symptom of what we perceive as a pendulum swing from a near-exclusive focus on farm production in rural development projects in the 1980s to a focus on organization-building in the 1990s, with a relative neglect of farm production of inputs into the activities (marketing, processing) of the organizations involved (Berdegue, 2001). This neglects the fact that most of these organizations indeed depend on a fixed set of suppliers, and thus what happens at the level of those suppliers has huge consequences for the performance of the organization. A good sign is that a number of the projects we studied corrected for this bias and included development of input supply (farm or other input production level improvements) in addition to the RNF activity promotion: that is to be encouraged.

Second, it is uncommon for an intervention to be implemented by a single entity; rather, it is common for the implementer to be a set of actors – combinations of the municipal government or council, the regional/state government, the national government, a local, national, or international NGO, and a national extension or training agency. This combination ensures local “ownership” and guidance of the intervention, as well as bringing to bear national and international resources to accomplish the objectives. However, having several actors involved in implementation also raises the potential problem of the complexities of inter-institutional dynamics and networking. Many projects fail in that regard (Berdegue, 2001), but none of the case study authors discussed these issues.

Third, most of the interventions take an explicit or implicit “supply chain” approach – identifying markets and then meeting the market requirements with interventions at each level of the supply chain, from input access to production to marketing to the final consumer. Note that while the terms are similar, the “supply chain” and “supply-side” approaches are very different, with important consequences for effectiveness of the intervention. The “supply side” approach is a traditional approach that tends to focus on “produce it and then try to sell”, with little

attention to issues along the chain nor to the final market, the buyer. The supply chain approach pays attention both to production issues, but also to the effective functioning of the full chain and to the requirements of the market. Some of the interventions use non-local private or NGO actors to help suppliers link to the market. Examples include selling through exporters under contract, and using the services of international NGOs to locate buyers.

Fourth, most of the interventions provided implicit or explicit subsidies – providing free training, cheap intermediate inputs or equipment, working capital under market interest rates, transport of participants to trade fairs, and so on. In some cases, there is explicit provision for reducing the subsidies over time, leading or forcing participants to gradually pay their own way and become independent.

Fifth, most of the interventions included helping participants to access credit – either subsidized credit directly from the project, or credit from the local credit market with help from the project, in the form of training in how to access it, acting as co-signatory for the loan (and thus providing collateral), or collective organization that was the key to getting a loan.

Main chain-level specific actions of the interventions

With respect to input-access level actions, several generalities stand out.

First, the interventions promoting food and non-food crop processing usually include training in production of the intermediate input (fruits and vegetables, milk, trout, pine trees). This means that the new RNFE projects have not necessarily induced abandon of farm sector interventions, but have served to orient them.

Second, where necessary, interventions attempt to facilitate access to inputs (factor or intermediate) for production of non-food manufactures, such as by organizing buying rural economic organizations for sheet metal for metalwork in Honduras, or selling clay to artisans in Peru, or supplying equipment to food processors in Colombia. In some cases (such as in trout processing in Peru), the project facilitated a large-scale private firm's investment in equipment and infrastructure for the rural economic organizations. In some cases the project or program, coordinating with various levels of government, facilitated infrastructure improvement in the area, as needed for the productive activities.

With respect to RNFE-production-level actions, several main actions stand out. The overwhelming generality is that the interventions include training, training, and more training. The focus is on production techniques, but also includes training in understanding and meeting standards and seeking certification. The training in some cases is via pilot plants that offer demonstration, such as for milk processing in Peru. The projects also provide subsidized equipment and seed capital for plant.

With respect to marketing actions, several actions stand out:

- Most of the interventions have a component of market research and identification, with the end product a marketing plan.
- Most of the projects including training in marketing; the training covers a range of elements (packaging, distribution, demand identification).
- Many projects facilitate contacts with buyers, via for example trips to trade fairs, to supermarket chains, to shops.
- Some projects facilitated or directly undertook direct sale of the merchandise, for example via processing firms, government procurement, or exporters.

The rest of this report explores in detail, with illustrations, the best practices emerging from the above main actions and approaches.

Table A9.1 Basic characteristics of intervention studies

<i>Intervention</i>	<i>Start year</i>	<i>Activity focus</i>	<i>Target market(s)</i>	<i>Target Participants</i>	<i>Implementers</i>	<i>Funders</i>
Brazil – Rio Grande do Norte	1999	Clothing manufacture	Mainly urban southern Brazil but also local urban	Rural workers in rural economic organizations	State and municipal governments and national NGO	Government of Brazil
Brazil – Paranha	1999	Processed foods	Mainly local urban	Self-employed already in activities	State and Municipal Councils	World Bank and GOB
Chile – national	1992	Rural tourism	National urban and foreign	Self-employed, individuals and rural economic organizations	Government of Chile (INDAP)	Government of Chile
Honduras – Lempira region	1988	Agriculture, natural resource management, and diverse RNFE	Local rural and local-export and local urban	Farm households and rural town workers, associations	FAO and Ministry of Ag	FAO and Government of Honduras
Mexico- Chiapas region	1986	Growing, processing, marketing coffee	National urban and export	Farmers in the coop	Coop	Initially Catholic Church, then GOM, then self-financed
Peru- Huancayo region	1998	Raising and processing trout	National urban and mainly export	Rural rural economic organizations and large private firm	USAID and GOP	USAID and GOP

Table A9.2 Basic characteristics of completed intervention studies

<i>Intervention, by place</i>	<i>Start year</i>	<i>Activity focus</i>	<i>Target market(s)</i>	<i>Target Participants</i>	<i>Implementers</i>	<i>Funders</i>
Brazil, Rolante, Rio Grande do Sul State	1997	Diverse: Program (that started 11 projects) promoting employment in range of services and manufactures (especially agroprocessing)	Rural and urban, in-region	Rural economic organizations, MSEs, and workers	Municipality of Rolante	Municipality of Rolante (which seeks funding from higher levels of government)
Brazil, Dos Irmaos, Rio Grande do Sul	2000	Rural tourism (in German colony and coffee area)	Customers from nearby cities	Family farm households in association	Municipality, and various local associations, and state extension agency	Municipality
Colombia, Cundinamarca region	2000	Diverse: Program (that started 37 projects) promoting employment in range of services and manufactures	Local rural and regional urban	Rural economic organizations	Government of Cundinamarca (regional) and IICA	Government of Cundinamarca and IICA
Paraguay, Chaco Department	1999-2003	Milk products manufacture and marketing	Government procurement (for school milk programs)	Farmer rural economic organizations	Regional government and Community Development Councils	GOP
Peru, Arequipa	1992	Milk products manufacture and marketing	Regional urban	Small farmers	NGOs (CEDER and FONDESURCO)	InterAmerican Foundation (US) and Fondo Contravalor Peru-Canada
Peru, Cajamarca region	2000	Milk products manufacture and marketing: Pilot project to improve cheese production, diversification, storage, marketing	Regional urban	MSEs and workers	The local NGO "Centro Ideas"	GTZ and the NGO "Centro Ideas"

Table A9.2 Basic characteristics of completed intervention studies

<i>Intervention, by place</i>	<i>Start year</i>	<i>Activity focus</i>	<i>Target market(s)</i>	<i>Target Participants</i>	<i>Implementers</i>	<i>Funders</i>
Peru, Chulucanas region	1998	Clay art manufacture and marketing	Export	MSEs	The Peruvian NGO "ADEX" (export development association) and ATA, international, www.aid2artisans.com	USAID and export firms
Venezuela, Miranda State	1998-2001	Processed food manufacture (mainly horticultural)	Local rural and regional urban	Small farmers and woman-run MSEs	The non-profit "Polar Foundation", www.fpolar.org.ve And the (local) rural agroindustry association	The non-profit "Polar Foundation", founded by a major Venezuelan food company

Table A9.3 Main actions in the commissioned-study interventions

<i>Intervention</i>	<i>Meta-level actions (link to LED and demand)</i>	<i>Supply chain: Input-access</i>	<i>Supply chain: production</i>	<i>Supply chain: marketing</i>
Brazil – Rio Grande do Norte (clothing rural economic organizations)	(a) Municipal govt., State govt., and national NGO (SEBRAE) coordinate; (b) clothing producer rural economic organizations contract with large firm; (c) firm identifies demand and markets	NA	Training in sewing	Private firm markets products in urban southern Brazil and locally
Brazil – Paranha (food processing)	(a) Municipal Councils identify needed public investments; (b) regional project's management, Municipal Councils, and State govt. coordinate for public investments and to create coordination in State govt. agencies to improve regulations as enabling environment	Training in vegetable production	training in processing	(a) training in packaging, marketing; (b) facilitating contacts with buyers (e.g., supermarkets in local cities); (c) work with State govt. for certification of firms (health, safety)
Chile – national (rural tourism)	(a) national program (INDAP) works with rural economic organizations and individuals per region; (b) provide finance and technical assistance	Links to INDAP small farmer training and loans	subsidized loans to participants and creation of national standards	national conferences and general publicity
Honduras – Lempira region (diverse manufactures)	(a) Municipal Councils identify demand and local supply interest; (b) project works with rural economic organizations and individuals; (c) project helped organize trade associations; (d) helps (via organizing) participants' access to local credit sources; (e) coordinates with GOH for infrastructure improvement; (f) coordinates with NGOs and national trades-training program (INFOP)	(a) organized input purchase coop for metalwares; (b) link with NRM program in pine forest management (input into woodworking)	training (joint with INFOP) in carpentry and metalworking, cheesemaking, brickmaking	(a) buyer contacts/visits to markets; (b) training in market identification and adaptation
Mexico- Chiapas region (coffee processing)	large cooperative that has its own processing plant and sales points in large Mexican cities and commercial links with foreign marketers	Farm production training	(a) training and monitoring of coffee production; (b) 3 rd party certification of organic	direct distribution through coop's own sales points and contracts with foreign sellers

Table A9.3 Main actions in the commissioned-study interventions

<i>Intervention</i>	<i>Meta-level actions (link to LED and demand)</i>	<i>Supply chain: Input-access</i>	<i>Supply chain: production</i>	<i>Supply chain: marketing</i>
Peru- Huancayo region (trout processing)	(a) project helped private processing/exporting firm and small producers rural economic organizations link: did market and technical study; organized contacts/negotiations; (b) private firm financed capital improvements in coop farms	Private firm invested in rural economic organizations fish farming equipment	firm processes fish to international standards	firm markets fish

Table A9.4 Main actions in the competed-study interventions

<i>Intervention, by place</i>	<i>Meta-level interventions</i>	<i>Input access level interventions</i>	<i>RNF production level interventions</i>	<i>Marketing level interventions</i>
Brazil, Rolante, Rio Grande do Sul State; broad program	<ol style="list-style-type: none"> Actors are Municipal Council & Regional Extension Institution & several rural economic organizations & Rural Union Actors diagnosed RNFE markets and formed plan, sought funding, started 11 RNFE projects in services (e.g., tourism) and manufactures (e.g., processed foods). Inter-agency coordination at municipal level for RNFE enabling conditions (e.g., reduce legal barriers). 	<ol style="list-style-type: none"> Production infrastructure: Most rural investment by Municipality channeled via project. public services (health, sanitation) federal, state, local, and World Bank 	Mainly training	Each project was assigned a committee at the municipal level, to study the market for the RNFE product
Brazil, Dos Irmaos, Rio Grande do Sul	The project follows 4 steps: (1) market research on what tourism services potential clients want; (2) organization building; (3) technical assistance (with help of EMATER, regional extension agency) for the association; (4) evaluation.	Identify needed changes in sanitary conditions and give technical assistance	Training to receive clients	Develop marketing plan and research on clients' needs
Colombia, Cundinamarca region; broad program	<ol style="list-style-type: none"> funds RNFE project ideas proposed by communities explicit link with other organizations/NGOs tech assistance, involving local university students learning-by-doing and building organizations emphasis on financial sustainability (participants must save and invest in activity; only work 1 year with group) 	Program funds 85% of equipment/tools a given project needs; community pays other 15%	Program provides technical assistance	The community organization in charge of a given project identifies market demand locally or in the region's cities
Paraguay, Chaco Department; milk products	<ol style="list-style-type: none"> to shift government milk products procurement from large farmers to small work with small farmer dairy rural economic organizations subsidize assets along the chain 	<ol style="list-style-type: none"> Provided more productive cows training 	Provided processing plants and seed capital for additional private investment; training	Government procurement of the product

Table A9.4 Main actions in the competed-study interventions

<i>Intervention, by place</i>	<i>Meta-level interventions</i>	<i>Input access level interventions</i>	<i>RNF production level interventions</i>	<i>Marketing level interventions</i>
Peru, Arequipa; milk products	<ol style="list-style-type: none"> 1. Build pilot plants for demonstration and training and to introduce products into urban markets to create demand. 2. Organize group for marketing and milk production. 3. work with producers on standards, consistency, and labeling to sell in urban market 	<ol style="list-style-type: none"> 1. irrigation 2. milk cattle 3. sanitary conditions 4. credit 	Pilot plants used for training and demonstration	Pilot plant sold milk products in city to familiarize merchants with products and compete with large firm (Leche Gloria)
Peru, Cajamarca region; milk products project	<ol style="list-style-type: none"> 1. participatory approach to milk processing and storage, product improvement and diversification, and marketing 2. project provided equipment and training for the milk processing plant for the coop (promoted as a pilot plant to inspire private emulation) 	Promote low use of external inputs in milk production	Project provides equipment and infrastructure and training	Project funded market contacts (trips by participants) in urban areas
Peru, Chulucanas region; clay art manufactures	<ol style="list-style-type: none"> 1. Via CEDAR (Artisans Center of Chulucanas), an NGO, provide services to local artisans 2. First CEDAR and ATA (international NGO) analyze market, and then provide assistance along supply chain 3. seeks further local and donor funding 	CEDAR sells clay to artisans and technical assistance in choices	CEDAR brings in international experts in design from ATA to train local artisans in design and production	<ol style="list-style-type: none"> 1. works with exporters (contracts to sell via them) 2. brings products and artisans to national & foreign trade fairs in US & Europe
Venezuela, Miranda State, processed horticulture products	<ol style="list-style-type: none"> 1. focus on training (80% of budget) and group organization 2. chain approach: sequence of actions from crop production, to crop processing, to marketing 3. focused on semi-commercial stage (diversification of products, adapting the processing to food safety regulations, focus on local market 4. revolving fund with seed capital from project but charges interest to help transition to commercial approach 	Training in production of fruits and vegetables	Training in processing	Training in marketing and establishment of sales centers

Synthesis of findings concerning best practices and strategies at the “meta-level”

We define a “meta-level” action as an intervention that is not specific to a level of a supply chain for an RNFE product, but instead:

- improves the overarching enabling environment for RNFE activities
- identifies and links the RNFE promotion efforts to growing sources of demand
- promotes links between specific efforts to promote RNFE and general efforts of local governments and non-governmental organizations to promote local economic development (LED).

Most of the projects studied have as their planning and operational perspective the local rural space, including the countryside and the rur-urban areas. This leads to actions to coordinate with efforts of other development stakeholders in the zone, including government and NGOs, associations and private firms.

Moreover, “best-practice” projects work beyond the traditional parameters of supply-side focus. Instead, the perspective taken by the project is to focus on market demand and meet the requirements imposed by that demand via improvements to the whole supply chain, from input access, through production, to marketing. This is such a successful practice because initial success at one level of the chain can be undermined by bottlenecks at other levels – and success on the supply side can be stopped in its tracks by lack of market demand. That is, excellent production practices but poor marketing means unsold product. Several specific best practices stand out and are discussed below.

Set up the general institutional apparatus needed to identify market opportunities and subsequently to coordinate needed actions to improve the supply chain to meet the requirements of the market. A first good practice is to organize local associations or municipal councils for the promotion of RNFE. The following Box A9.1 illustrates this. These associations provide a forum for discussions concerning RNFE options, potential markets, and interventions needed at a community level to improve the supply chains (e.g., to improve infrastructure). This can be to generate ideas and to identify needs, to coordinate local actions, and to link community actions with regional and national government and NGO actions.

Build rural economic organizations to pursue the general market opportunities identified by the municipal councils and regional bodies. Most of the projects studied work mainly with rural economic organizations (such as cooperatives), for several reasons, to: (a) spread fix costs over more units and create economies of scale; (b) create critical mass for investment; (c) build capacity in existing local organizations as part of philosophical commitment of project; (d) better connect to local financing that requires that only groups borrow; (e) create critical mass of supply to the market; there is an implicit belief that only groups, not individuals, have a chance in competitive markets; (f) associations promote social capital, which lowers transactions costs and increases information transfer.

The projects tend to either work with groups that existed when the projects started (such as did the FAO project in Honduras) or to set up new ones (such as in the Northeast Brazil project). The projects tend to plan jointly with the organizations rather than to impose plans. The Honduras project worked with the livestock association in the rural town of Guarita to plan a cheese enterprise for sale in the region. They also helped organize the formation of a metalworkers association.

Box A9.1 Municipal Councils coordinating with regional government to create enabling conditions for RNFE

Interventions create or reinforce “municipal councils” or similar associations to organize and channel interaction with regional and national governments. Following are examples.

Brazil/Parana Project (Commissioned Study). The Brazil/Parana project used existing Municipal Councils set up under a watersheds program in Parana sponsored by the World Bank. The councils sponsor forums where the community recommends areas of agro-processing production and marketing that they want to improve, and that becomes the basis of the project’s actions. Those demands are channeled as a proposal to the Regional Executive Commission. The latter analyzes and approves it, and then works the proposal through regional government agencies. The Commission provides feedback to the councils concerning needed actions to meet regulations. Local and state governments then provide technical assistance, training, financial assistance, and coordination of regulatory bodies at the state level in order to facilitate certification of the processed horticultural products with a quality label. The project works closely with the regional government to simplify regulations and consolidate and link agencies (in Regional Executive Commissions) related to human and agricultural health, food processing, and product safety to help rural entrepreneurs obtain legal status and thus expand their markets to urban areas. They also then provided “kits” to participants to help them accomplish business registration.

Peru/Huancayo Project (Commissioned Study). The Program (in which the trout processing project fits) has promoted Regional Support Committees consisting of representatives from Regional Government, local public organisms, municipal governments, business associations, farmer associations, and universities. The Business Services Center of the program promotes dialogue within the Committees for better regional coordination of policies and public investments. The program works with the Regional Government (CTAR), the Ministry of Fisheries, and the Business Development Services Network to coordinate promotional actions and to sponsor Management Training Workshops. *Brazil/Rolante Project (Competed Study).* In 1997, the Municipality of Rolante developed a Multiyear Rural Development Plan to provide support to activities responsible for rural employment (dairy processing, leather and shoe factories), the creation of new jobs and the monitoring of quality of life and environmental protection. With the collaboration of EMATER/RS (the State Extension Agency), the Municipal Agriculture Secretariat, a rural credit cooperative, the rural workers union, some agriculture producer associations, the Animal Health Inspection Service and other local institutions, the Municipal Council for Rural Development (MCRD) was created. MCRD was in charge of the development plan that included actions directed to create projects for production of public goods and services (health services, school snacks, school transport) and private goods and services (food processing, handicrafts, cookies baking, sanitation services (for firms), rural tourism, and public taxis).

Choose specific RNFE markets, preferably characterized by growing demand based on “growth motors”. A “market” is defined here as demand for a specific product, by a specific socioeconomic group, in a specific place (red beans by the poor in Lima, for example). An economic “motor” is an economic activity that creates growing demand for other economic activities, by three routes: (1) raising incomes which then are the source of growing consumer demand for the products of the other activities; (2) creating derived demand on the input (upstream) side for inputs to it from other activities; (3) creating derived demand for processing and commerce downstream from it. The motor can be local (such as an agriculture boom in the rural zone in question) or outside it (such as a nearby mine or city, or a rich economy outside the region from which local rural people earn remittances in migration).

A good practice for an RNFE intervention is to link the promotion (from the supply side) of RNFE activities with identified demand sources for the products of those activities.

Box A9.2 Building rural economic organizations as basic to the project

Venezuela (Competed Study). In 1998, the Venezuelan non-profit Polar Foundation (created by a large food company) initiated a three-year project in the Miranda State, Venezuela, with the objective of strengthening the socio-economic level of a particular population through the organization of a mechanism to produce, process, and market selected agricultural products. It is directed to small farmers and artisan women with little schooling. Three components constitute the core of the project: production of agricultural products, processing of horticultural products, and marketing of processed products. The basic strategy was the creation of incentives to link different steps with the agro-productive chain. The central idea concentrated on making room for new non-agricultural jobs required for such integration. Four major incentives were set: (1) Training and group organization, (2) sequential implementation stages, (3) a subsidy fund, and (4) support to marketing at different stages. Training was twofold: basic principles for social organization and managerial/entrepreneurial capacity, and technical skills in production and marketing. It resulted in the creation of a civil organization with the participation of man and woman. Specialized consultants were required to strengthen this process. As a permanent activity, training takes about 80% of the annual operation budget.

The project has two best-practice options. On the one hand, the project can choose *a priori* an RNFE product (such as, cheese) but then needs to choose the target market according to the existence of growth motors that will raise incomes and spur demand for cheese. For instance, the project might note that the local rural market has limited capacity to absorb more cheese, and aim at the growing market (and growing incomes) of a local intermediate city. On the other hand, the project can choose a general target market (such as growing local towns) and ask “what RNFE products do consumers in the towns want to buy, and can rural folk produce them at competitive cost and quality?”

Box A9.3 illustrates different target markets, each of which is fueled by different motors (national-level industrialization, migration remittances, agricultural booms, and so on). Note that most of the interventions studied are in poor zones, so there are few stories of RNFE supply being aimed at growing countryside markets with the motor being an agricultural boom. Thus, in most cases the markets (outside of the countryside in which the project operates) are growing much faster and are less market-risky (in terms of demand fluctuation) and can absorb much more non-farm product than can the local rural markets. That point was a factor persuading the projects to target those non-local markets.

Box A9.3 Identification of target market options

Foreign markets as the target market. The Peru-Huancayo project links local trout production and processing to foreign markets: the local market for these products is extremely limited, while growing incomes in foreign markets fuel rapid demand increase for seafood, fresh and processed. The safety, quality, and packaging requirements are very high. Note that this business opportunity was identified by a local consortium that won the competition sponsored by the Project. The consortium was led by the local university (Universidad Cayetano Heredia), the Rural Support Center, and a private firm, Inform@ccion. They did studies of market potential and identified the processed trout market as a promising opportunity.

National urban markets as the target market. The Chile project links rural tourism services to demand arising from growing urban economies and demand from foreigners. In the past decade, with significant urban income growth, there has been a rapid rise in urban demand for services, including tourism. Part of that is satisfied by beach resorts, ski lodges, and island tours. But rural areas offer a range of tourism opportunities, such as ethnic and eco-tourism and camping in rustic areas, as well as spinoff services for tourists in transit to other areas, who like to stay in a rural inn, eat at a roadside restaurant, or buy crafts from rural people. INDAP identified that demand and put in place a major program in 1992 to supply those services to mainly urban consumers.

Rural towns and intermediate city markets as the target markets. Rural towns and intermediate cities are growing very quickly in many regions of Latin America. That growth is fueled, in poorer areas, by the rural poor fleeing the countryside, by public services employment and commerce locating mainly in towns, and by the receipt of migration remittances. In richer areas, with more dynamic primary sectors, manufacturing and eventually services grow and agglomerate in rural towns and intermediate cities. Incomes and population, and thus nonfarm product markets, are growing faster in those towns than in the poorer countryside. That makes towns and intermediate cities attractive target markets for RNFE products. For example, the Honduras project recognized that rural towns are growing fast in and near the poor Lempira region, and conceived of a series of RNFE activities that would supply goods and services to growing towns. For instance: (a) consumers with growing incomes want processed foods, especially in dairy and fruits/vegetables, so the project promoted cheesemaking and vegetable pickling; (b) migrants like to invest their remittances in new buildings and home improvements, so the project promoted metalworking to supply kitchen and workshop appliances, doors and shutters, pails and machetes, as well as bricks and furniture. Moreover, it has adapted these products to be competitive in the face of readily available cheap imports from outside the region, although that continues to be a challenge.

Government Procurement Market. The Paraguay (competed) study: The Small Dairy Producers Committee and the Communal Development Board created a project to provide milk for schools snacks in the Department Presidente Hayes, Paraguay. This is a four year project (1999 – 2003) aimed at capturing the national budget allocation for schools snacks and, in the future, adding value to dairy production by processing milk, which is widely produced in the region. The Departmental Government spends about \$ 300,000/year to provide school snacks to approximately 16,750 students in 51 schools in this region. Up to 1998, milk was obtained from several rural economic organizations (of large farmers) located in other regions in spite of the fact that President Hayes Department produces livestock (2,100,000 head) and enough milk to satisfy school children's consumption.

Develop access to assets needed to meet RNFE market requirements. Each market has specific requirements with respect to cost, quality, safety, consistency, volume, and timing. These requirements imply capacity needs and thus access to assets on the part of RNFE producers (both as individuals and as groups).

The first asset required is skill/knowledge related to the market and to technologies. This is especially important in the newly competitive markets outside traditional countryside markets where the producer is in familiar territory and "local knowledge" is sufficient. The training is often in both production and marketing, not just the traditional training in production. Training is done both in a "canned" manner as well as an adaptive, flexible, hands-on training in strategic planning and market discovery. There is an incipient recognition in most of the projects that the market is changing very rapidly and flexibility rather than rote learning need to be staples of survival strategies. The marketing training is usually done in "hands on" group trips to meet with buyers.

The second asset is entrepreneurial and management skills. Many of the programs/projects recognized that for rural economic organizations to withstand the onslaught of centrifugal forces created by competitive markets, participants would need skills to manage their organizations. But as noted above, a number of the projects went beyond the inward-orientation of just building the organization, to teaching participants skills in being entrepreneurs (finding and pursuing new markets) and managing their activities in a market environment that requires attention to chain coordination and quality standards. Good RNFE projects emphasize a new culture in which individuals emphasize quality, responsibility in delivery, and in meeting safety and quality standards. The latter relates to the next point.

The third asset is new “rules of the game”. In general, the growth of the newly competitive markets of the 1990s has been accompanied by a growth in the number and exigency of quality and safety standards. In many cases these have been standards specific to large supermarket or hotel chains (private standards, rather than public standards; see Reardon and Farina 2000). Some of the farsighted projects we studied, however, recognized that if rural producers want to participate in competitive markets, they need to meet these demanding private standards (hence the second asset discussed above). Furthermore, some interventions (such as the Chilean rural tourism program or the Brazil-Parana agro-processing project) created standards and certification/labels to communicate the implementation of the standards to the consumer, thus creating a market for the RNFE product. This is discussed further under the marketing level of the chain, below.

The fourth asset is access to credit markets. Financial institutions usually figure as “soft infrastructure.” Every project studied had an important activity of providing subsidized credit (replacing missing financial institutions), facilitating the access to credit from non-subsidized sources such as local banks and rural economic organizations, or directly building financial institutions such as rural economic organizations.

Most of the projects have some system of financial assistance. Some help their clients to obtain credit such as from financial rural economic organizations in the area (Honduras) or give various direct loans (the Chile project).

The fifth set of assets required is hard infrastructure. Only a few of the projects studied have a mandate to build basic infrastructure such as roads. But several of the projects explicitly encouraged other agencies to improve infrastructure that would facilitate the RNF activities.

For example, in the Peru/Huancayo project region, the Rural Roads Program was started in 1995 by the Ministry of Transport, Communication, Housing, and Construction with funding from the World Bank and IADB. Roads were improved by 800 construction firms, and are being maintained by 400 microenterprises (23 in the Huancayo Economic Corridor). Some of these are now linked to the trout production activities of the two parties.

Actions Specific to Particular Levels of the Supply Chain

This section discusses actions that are specific to particular levels of the supply chain, starting from “upstream” in the chain, input supply to RNF production, to RNF production, to distribution/marketing of RNF products.

Actions to improve access by RNFE producers to inputs – raw materials and equipment

This action is, in the domain of promoting RNFE, the parallel to providing seed in an agricultural project. Just as the right kind of seed (both to fit the production process and to produce the attributes of the final product desired by the market, and at a cost that keeps farming profitable, all else equal) is crucial in a farm sector project, so intermediate and capital inputs of the right quality and cost are needed for RNF production.

The right “quality” in practice implies a set of attributes: appropriate quality, timing, and safety of the inputs. It also implies access to inputs in the right quantities, and sustainable access (for example, that the periodicity of RNF production and input access mesh). A key point is that both “quality” and “appropriate” can only be defined in

Box A9.4 Building production and marketing skills

Building market knowledge is a focus of the Honduras project. The project takes Honduran cheese makers over the border to meet with buyers in El Salvador markets. The training is not confined to being undertaken by the project; rather, the project builds links with other entities that can do a better job of training in certain aspects. An example includes the Honduras project using INFOP, the National Professional Training Institute for training in carpentry and metalworking.

Most of the projects studied use external, national resources for training, thus “leveraging” their project resources and improving the quality and quantity of training.

relation to the requirements for the characteristics of the final product as defined by the market, say in product specifications in contracts, in public or private grades and standards, and in public regulations.

Box A9.5 Combining farm sector and RNFE promotion

The Honduras project (commissioned study) was originally and is still primarily an agricultural and natural resource management project, and secondarily an RNFE promotion project. It has sought to link those components so that they mutually reinforce: (a) identify RNFE activities that improve or remove constraints to the farming activities that it promotes; an example is their training artisans to make grain storage silos to handle the greater maize output resulting from increased farm productivity based on farmers using the improved farming practices promoted by the project; (b) identify farming and forestry interventions that provide improved inputs to RNFE activities that it promotes; an example in the farming domain is their providing training to improve milk production in the dry season that allows for and processing of milk into cheese for the local market; an example in the forestry domain is their training and organizing a community in pine forest management, in resin and wood extraction, in resin and wood processing (sawmill and carpentry), and in resin and furniture marketing to the local towns and intermediate city.

The need for a combination of quality and low cost creates a challenge for RNF projects. The dilemma is that it requires the project to either find a cheap source of inputs for the participants to buy, or it involves development of the primary sector activities of the participants, thus often adding an agricultural component to the project or encouraging close links between the project and primary sector projects in the area. It is not a priori necessary that the RNF producer also produce his/her inputs – that is, that a food processor is also a farmer. Whether it is necessary depends on whether the market for crop or livestock products, or clay or cloth or other RNF activity inputs, functions well. It is in fact preferable that eventually the RNF producers can simply buy their inputs and focus on RNF production, to reap gains from specialization. The latter assumes that participation in RNFE is no longer primarily for overall income risk reduction.

However, it should be noted that often, especially in areas of smallholder farming, that the cost and quality of the primary sector output is not adequate. This is especially true in the case of fruits and vegetables and milk, which are prime candidates for food processing. Lack of attention to improving crop and livestock production then would undermine success in RNFE promotion, especially if the latter is targeting urban markets that demand quality and safety at low cost. That leads us to the first good practice, below:

- A good practice is for a given agency having both farm sector and non-farm sector promotion activities, to coordinate and link them in its field projects.
- A good practice is helping the participants to organize for collective purchase of non-agricultural raw materials to RNF production.

As noted above, projects are not always able to or need to promote own-production of intermediate inputs. This has good precedent, in fact. Saith (1986) notes that the foundation of Japan's industrialization was laid in a rural industry that used only imported intermediate inputs—the textile industry using imported cotton. A

century before, Britain used exactly the same strategy, importing cotton from its colonies and producing textiles in rural as well as urban workshops and mills.

Several projects studied exhibited this practice. The projects helped the participants to organize into collectives to buy or produce the intermediate inputs, to buy in larger scale and get lower prices. Usually they were the same groups (the metalworker association members also belong to the sheet metal buying cooperative in Honduras, the trout producers in Peru collectively buy fish-feed from a feed processor in Lima).

A crucial practice is helping to finance directly or facilitate private investment in equipment of the type and scale required for RNF production in competitive markets. The simple reality is that without outside help, most rural economic organizations would find it hard or impossible to buy large equipment or plant needed to attain the quality and scale needed to sell in competitive urban markets. Box A9.6 illustrates ways that projects helped. A further example, where the Peru project facilitated a private firm's investment in trout processing physical capital (improvements in canals) for the trout producing cooperative, is discussed below.

Box A9.6 Interventions helping organizations to have access to equipment and plant

Brazil/Northeast (commissioned study). One of the actions of the Ceara Mirim project was to help the COOPERVALE cooperative. In 1999, 20 women formerly devoted to sugar cane harvesting created the Seamstresses of Mato Grande Cooperative (COOPERVALE). The group grew to 60 members and has initiated its own clothing product lines. Today only 30% of total production is contracted and the remaining is marketed as final products through its own Marketing Division. This dynamism has allowed it to become partially independent from the project itself (a sustainability success...), up to the point that COOPERVALE has undertaken leadership when the local Vice Prefect - who was the major actor in the project - was removed from his position last year. This is a case of true local ownership of a project.

COOPERVALE has signed a new project accord with the newly elected local and State governments, integrating eight sewing associations that have been trained by the cooperative. The State Government will be the co-signer for COOPERVALE to obtain credit to buy sewing machines, since presently it is renting equipment. It is expected that an increase in production will allow COOPERVALE to launch its own trademark in the near future. Other production phases such as design, cutting, modeling, and quality control are being introduced into COOPERVALE production in order to access the market directly and contract other associations for specific dress part assembling.

Peru/Cajamarca (competed study). In 1999, IDEAS – a Cajamarca NGO- and GTZ/PRONAMACHCS – a rural development project- launched a pilot experiment to improve traditional cheese production, storage, and marketing. The participants are poor rural families. The idea was to introduce improved technology and practices at each stage of the supply chain, and to diversify the milk products sold. The goal was to create employment and build entrepreneurial capacity. The project built a small plant to process milk in Leoncio Prado. The project's pilot plant produces diverse milk products (cheeses, butter, yoghurts, sweet creams) that are marketed to the region's main urban markets, in San Marcos and Cajamarca. San Marcos is also the original market for the traditional cheese. The project has subsidized costs involved in approaching the regional market, including personal contacts and product presentation to potential buyers. This pilot project is centered on the processing plant that buys milk from all associated families that form the micro-enterprise that own and operate the plant. It is thus a direct integration of raw material production, processing, and marketing.

RNFE-production level of the chain

The best practice is to adapt RNF product design and production technology to needs/wants of the market. At least traditionally, although there is evidence that there are still many extant projects that have this problem, projects focused on the supply side without sufficient reference to what the market requires, what the consumer wants. The result was and still is the extremely high failure rate of small enterprises that emerge from the typical development project.

The new type of intervention, on which we focus in our studies, goes beyond “business as usual” to both identify motors of growing demand (as discussed above), and to painstakingly adjust production promotion strategies and practices to the set of requirements of those growing markets. Those requirements include quality, safety, timing, volumes, costs, and product types. In each case, the projects adapted and re-adapted packaging, labeling, product type and quality to changing consumer needs. That is important in the newly competitive market (after the spate of policy reforms liberalizing markets and deregulating the retail sector in the 1990s).

Marketing-level of the chain

Seek detailed, strategic market information. This is one of the most challenging and important “best strategies” of the new projects. It is no longer adequate for market information to consist of price data alone. Gone are the days of producing general commodities for local markets with little market information necessary. Rather, useful information is now strategic information, going well beyond prices to include specific potential buyers (sometimes chains and large firms), terms of potential contracts, quality and safety standards and regulations, cost, timing, volume requirements, and buyers' preferred design specifications.

Essential is market diagnosis with the results made known to the producers. Examples of such diagnoses are given in box A9.7 above. This allows the producers to adjust their product (type, quality, design) to the market demand.

Box A9.7 Adjusting RNF production to the requirements of the market

Brazil/Ceara Mirim (commissioned study). This project promotes subcontracted clothing production by producer rural economic organizations for big clothing firms that operate in the dynamic consumer markets of southern Brazil. These big firms stay in close touch with consumer trends and communicate the derived requirements (design specifications, colors, materials) in the contracts with the rural economic organizations.

A similar example is that of the Peru/Chulucanas project (competed study) where the potential market and the concomitant design requirements are ascertained by the international NGO International Aid to Artisans (ATA www.aid2artisans.org) and export companies with which the project participants are working (in business linkages, see below). The project then helps participants adjust to the market demand with training in design and production, introducing new technology in treatment and manipulation of raw material as well as finishing.

Peru/Huancayo (commissioned study). The project commissioned a consultant's report, that showed that substantial improvements in small trout-farmers production were needed (to improve quality and consistency that was necessary to sell to the private processing/exporting firm that had high quality standards for the export market and the supermarket/hotel/restaurant market in Lima).

Honduras/Lempira (commissioned study). The project took cheesemakers on market tours over the border in El Salvador and in neighboring towns, where they found that the traditional cheese that they were producing is not desired by consumers; a different kind of cheese, fulfilling consumers' wishes, then replaced or was added to the lines of cheese products made by the cheesemakers; the project helped them make that transition with technical assistance.

Chile/rural tourism (commissioned study) and the Brazil/Dos Irmaos (rural tourism) (competed study). In both of these interventions, studies were undertaken to understand clients' and potential clients' requirements and desires in terms of tourist amenities. That information was used to plan budget allocations and specific actions in the interventions.

Honduras/Lempira. A decade ago, the project emphasized metalworking as an individual, traditional technology workshops in rural homes, focused on grain silos. But as the demand expanded for metalware (especially in growing rural towns), the project added other metalwares such as buckets, watering cans, pots and pans, house fixtures, and so on. To bring down the cost and expand production, the project promoted (with financial and technical assistance) the formation of collective machine shops.

Several projects provide "direct informal contact" with buyers in various settings (conventions, trade fairs, at their headquarters) to provide market information to RNF producers. Examples are given in Box A9.8.

To access the chosen market and/or to meet the requirements of the market, sometimes it is necessary to create business linkages with medium/large private firms or associations. The linkages are needed for various complementary resources. In general both parties seek a linkage because the rural RNFE firm has low labor and land costs but is capital-poor, and the urban firm is capital-rich, and has knowledge, experience, and market contacts, but faces high land and labor costs.

Develop brands and labels and standards to improve buyer acceptance of RNF products. This is a crucial and innovative "best practice". The use of labels is increasingly required by supermarkets and demanding consumers. Two of the projects are emphasizing this, including the Mexico project with quality and organic standard labels and attractive packaging, and project quality and safety certification labels (accorded by the state government) to the processed vegetable products in Parana, Brazil.

Labels communicate characteristics of the product, including its meeting standards of quality and safety. In the case of organic coffee standards, the Mexico project obtained certification of the implementation of these standards from three foreign certification firms. INDAP in Chile is forming national rural tourism standards such as for cleanliness and facilities.

Box A9.9 Business linkages to promote rural non-farm enterprises

The Peru trout processing project illustrates business linkages. It was born of the joint action of a national private sector association and USAID. It focuses on encouraging private investment, and on linking private firms in the nonfarm sector (in this case, with trout processing firms) with local farmers associations. It encourages private investment through Economic Service Centers that provide the following to private firms and local producers: (a) market contacts inside and outside the region; (b) technical and market-information assistance for business in the region; (c) information about laws, insurance, transport and other business regulations and services; (d) formulation and submission of specific proposals to the national government for policies to create an enabling environment for private investment in the region.

The project identified the private firm (Piscifactoria los Andes, S.A.) as a leader in the market (with technology, market intelligence, brand, and HACCP certification for export to Europe). The firm wanted to expand its throughput in processing but lacked the funds for an investment in more trout farming capacity. The project helped the local farmers' association to improve its capacity (expansion and improvement of farm infrastructure) and quality in order to supply the trout to the private firm. The project acted basically as a facilitator of conversations between the two entities for them to form a "strategic alliance." The project also financed a market study and an investment study to inform the negotiations. 80% of the latter was co-financed by the two private parties.

The result is a renewable two-year contract where the farmer association supplies the processing firm with trout, and the latter loans the farmer association the funds needed for the capital improvements, and also provided technical and managerial assistance to the farmer association.

Box A9.8 Helping RNF producers know the markets: in Brazil and Honduras

The Southeast Brazil project recognized, as part of the design process, that local entrepreneurs in agro-processing were relatively ignorant of urban markets, quality standards in different markets, food safety regulations, and technologies available to meet the quality, cost, and packaging requirements of the urban market. It was perceived that this lack of knowledge, and thus ability to obtain legal status for their firms and certification for their products, was barring small-scale agro-processors from expanding their markets. Training participants in these, as well as gaining knowledge of those markets, is a major part of the project. The training includes participation in food trade fairs in the region and visits to supermarkets.

The Honduras project took project participants on tours and buyer-seller contact trips to various parts of the region and over the border to El Salvador to establish informal links and contacts for sales. The Honduras project takes groups of cheese and furniture producers on "giras" or tours of the markets over the border in El Salvador, in the city of San Pedro Sula and other regional intermediate centers.

The Chile program organizes nationwide tourism conferences and fairs where producers meet buyers and showcase their services, as well as provide websites with tourism locations and guest houses and campsites.

Sustainability and Cost of the Economic Activities Promoted by the Interventions*Working for the long-run public good?*

One concern is that the interventions are only creating private goods for specific private agents directly associated with the project, and thus substitute for general market development that will benefit broader sets of rural people.

There are two points that need to be noted in relation to this issue:

- In all cases, these interventions by and large are generating public goods such as price and market information systems, training and technical assistance programs; and the promotion and facilitation of communication and direct negotiations between commercial private firms and organized groups of rural people.
- The direct primary beneficiaries of these interventions are poor or even very poor rural people, who arguably require some form of direct and time-limited subsidy to be able to begin participating in more dynamic economic activities, even in cases in which there are market options available to other sectors of the population from which the poor are excluded because of transaction costs, asymmetric information and other market imperfections.

A pertinent question is whether such actions will generate a self-sustainable dynamic once the project ends. The answer in large part will depend on the success of these projects and programs in linking the rural communities with whom they work to dynamic markets. Since the projects or programs studied were started recently or even very recently, it is still too early to answer this question, although the general orientation or emphasis of the project on linking to expanding markets points in the right direction.

With those two concerns noted, we now turn to rough estimations of the costs of the interventions studied, and attempts in the projects and programs to “design sustainability” into the interventions, as much as possible in an uncertain and competitive economy.

Project and program cost versus benefits to employment

How subsidized are the projects? For this we can only compare rough expenditure to job creation ratios with averages from similar projects in other continents. That of course does not really tell us whether they are excessively subsidized in an absolute sense. If we knew the life of a job created we could compare the expenditure made by a project to the discounted lifetime stream of earnings from a job created, but we do not have even a rough estimate of the period in question.

The commissioned case studies show the following costs (project operating costs plus investments) to create one job in the nonfarm sector, ranked from the least to the most expensive. The details of calculation are under separate cover; due to differences in projects and data availability, the methods of calculation are only roughly similar across studies.

Box A9.10 Intervention expenditure per job created

The Honduras project, with a range of nonfarm activities, for an average of 765 USD (with variation from 1115 USD for a carpenter to only 50 for a smith or 240 for a clay figurine maker); that is about half the yearly average income (of 1500 USD per job);

The Northeast Brazil project focusing on clothing manufacture, 1100 USD (that is five times the estimated 200 USD yearly income per job);

The Southeast Brazil project focusing on food processing, 3050 USD;

The Peru project focusing on raising and processing trout, 5900 USD (about three times the yearly estimated income of 1750 USD per job).

The Chile project focusing on agrotourism, 11,400 USD (with a yearly income of nearly 1000 USD per job).

There are several reasons to find these numbers plausible (not inordinate) at least in their patterns and their relation to the very scant evidence available from other countries and projects. That does not indicate whether they are in an absolute sense high or low, which we cannot analyze.

With the exception of southeast Brazil, the cost of creating a rural nonfarm job is roughly correlated with GDP per capita, as one would expect. Moreover, the figures are roughly correlated with overhead, startup, and investment costs of the projects. The Honduras project spends the least to promote nonfarm jobs because the nonfarm component of the project is an appendage to a large and established agricultural project so these costs are merely incremental. The Chile project had heavy local infrastructure and training costs and is at an early stage of project life (as are the others except for Honduras). Note that we have, for data reasons, abstracted from duration issues.

Finally, the costs per job are in line with the (very scant evidence) available in the international literature. Harper and Finnegan (1998) find (we are selecting a few examples from their list) that the cost per job in ITDG’s project focusing on manufacture of improved stoves in Kenya was 3500 USD; mining project in Zimbabwe, 4300 USD. World Bank experience as reviewed by Webster (1990) lists investment costs per job (not World Bank bank subsidy or promotional costs, but rather investor’s investment per employee) as 9850 USD in Africa and 3171 USD in Asia. Finally, Levitsky (2000) finds that the cost per job created by business incubators in Brazil is 3258 USD.

De-subsidizing gradually to build independence of actors

The general approach of the projects is to offer fully subsidized services to the project participants, without an explicit plan to reduce the share of subsidy and increase the share of the participants' co-payment over time. But there are some important and interesting exceptions, as discussed below. Moreover, most of the projects have an explicit strategy for the medium term of reducing subsidies and increase co-payment and project withdrawal of support. We consider this a best practice in order to increase the probability of sustainability.

Box A9.11 Intervention innovations in making participants gradually independent

The Chile project has a seven-year limit on credit to a given participant; they also require co-payment for technical assistance (although this is seldom implemented).

The Peru/Huancayo project requires co-payment for investment studies and relies fully on private investment funds for capital investments.

The Honduras project is implementing gradual withdrawal from direct support for the input (sheet metal) cooperative supplying metalworkers.

In the Northeast Brazil Project, an independent cooperative (Coopervale) is being progressively relied on to supply training and organizational services to the rural economic organizations supported by the project.

Although credit is provided at subsidized interest rates, the Southeast Brazil project requires full repayment of credit.

The Mexico project "graduated" from its reliance on the Catholic Church (which initiated the activity) but still relies on direct and indirect financial assistance from the Mexican Government.

Intervention Design Implications

Given the fact that RNFE represents about 30% of total rural employment and 42% of rural income in Latin America and the Caribbean (Reardon et al. 2001), as soon as an organization opens up to looking at the rural economy as a whole, or, at the household level, to overall income (and not only at the agriculture sector or farm income), it is almost inevitable that the intervention's managers will recognize the importance of RNFE and RNF income for the local population, as well as the opportunities that can be found in areas different from agriculture. Indeed, we found that a number of interventions are being undertaken by donors, governments, and NGOs to promote RNFE in Latin America. We selected 14 of these interventions (programs or projects) for more detailed study to infer best practices and strategies.

Our review of best practices found in a set of 14 commissioned and completed studies of interventions to promote RNFE in Latin America, gave rise to a series of specific best-practice recommendations for donors, governments, and NGOs to apply to interventions. These have been set forth as "action steps" in this document, and illustrated from the interventions studied. The purpose of this final section is to summarize general strategic perspectives that arise from that set of specific recommendations. Table 9.5 summarizes the general principles, specific processes, and provides examples from the text of best practices and strategies. Below are several general lessons that emerge from that summary.

Table A9.5 Summary of principles and processes with illustrations

<i>Principle</i>	<i>Processes and Elements</i>	<i>Examples from the studies</i>
1. Meta-Level Actions		
a) Set up the institutional apparatus	<ul style="list-style-type: none"> > Municipal councils > Regional bodies > National bodies 	Municipal councils and regional government coordination in Parana, Brazil
b) Build rural economic organizations	<ul style="list-style-type: none"> > Professional associations > cooperatives 	Horticultural processing cooperatives in Venezuela
c) Choose specific RNFE markets based on “growth motors”	<ul style="list-style-type: none"> > local > urban > foreign 	Construction, processed foods, and metalware for rural towns, Honduras
d) Develop access to assets needed to meet RNFE market requirements	<ul style="list-style-type: none"> > Market knowledge > Production skills > Management skills > Access to finance > Regulations/standards > infrastructure 	<ul style="list-style-type: none"> > Building carpentry and metalworking skills in Honduras > Coordinating food processing regulations in Parana Brazil
2. Chain-level Specific Actions		
a) improve access to raw materials and equipment	<ul style="list-style-type: none"> > link with farm sector interventions > collectively buy inputs > facilitate investment by private firms 	Forming sheet metal buying cooperative for metalworkers in Honduras
b) improve RNF production	<ul style="list-style-type: none"> > training > technology design > adapt production design to market requirements 	<ul style="list-style-type: none"> > training food processors in better techniques in Parana Brazil > training agrotourism groups in better service in Chile
c) improve marketing of RNF products	<ul style="list-style-type: none"> > strategic market information > create business linkages > develop brands and labels 	<ul style="list-style-type: none"> > link ceramics artisans to international trade shows and firms > take cheese producers on market tours in Honduras > link trout producers to trout processing and exporting firms in Peru
3. Promote Market-Sustainability of RNF activities Promoted by Interventions		
a) gradually de-subsidize	require co-payment and investment	require co-investment by community groups in Colombia
b) create public goods		pilot milk processing plants to train producers in Peru

First, the best-strategy intervention involves a vision that the outcome of the intervention leads to multipliers from RNF activity that spurs local economic development (LED) in the zone. LED is growth which is inclusive of the poor, that is based on mutually reinforcing linkages between diverse economic activities that give employment to local people, and that derives its sustainability from dynamic sources of demand. This vision also embraces non-local sources of demand for local RNF products, and non-local sources of the inputs required for the production of those goods and services.

Second, the best-strategy intervention includes a mix of public and private investments and actions to promote market-sustainable RNF activity in which the poor participate. There is a vision that intervention-design should pay

attention to the overall enabling environment (such as policies and infrastructure and social-capital based organizations).

Third, the best-strategy intervention squarely faces the marketing challenge, as a priority. The cost, as well as the benefit of going beyond the local market and linking RNF strategies to demand spurred by growth motors, is that one has a “tiger by the tail.” The dynamic markets are more competitive and far more demanding than the traditional local rural markets. A high rate of failure is probably unavoidable, and projects should be prepared for a relatively long period of learning and adjustment. An “adaptive management” approach is required for this sort of project, as opposed to one in which decision-makers aim at delivering fixed, pre-established “optimum” solutions. For the same reason, these projects are social- and human-capital intensive.

Fourth, crucial to meeting the market challenge is to take a supply-chain perspective in promoting RNF activities, starting from an understanding of the requirements of the market, and working backwards to the improvements needed all along the supply chain to be able to meet those requirements. Explicit strategies of quality assurance, strategic market information, labels and packaging, contracts and organization are needed. These are big challenges for development projects as they are far from using the traditional skill sets of local governments, extension agents, and project managers. They thus require additions to budget, training and search for new kinds of personnel, and flexible and innovative project planning and management.

This perspective is part of a growing consensus of the weakness of traditional RNF projects that focused on micro enterprise, in manufactures, on supply side interventions, targeting only the local market. That approach was not necessarily bad two decades ago, but the context has changed in the past decade, with policy reform, improvements in rural infrastructure, and globalization. These latter have spelled the de facto de-protection of rural areas in LAC and the vast increase in competition in the nonfarm economy. Rural nonfarm firms now have to compete with urban and foreign manufactures, and conform to cost and quality requirements of the new markets. The context has also changed with the rapid rise in importance in the RNF economy of the service sector and of wage employment as rural towns have developed. The means that the rural world where interventions take place today is vastly different from the one of just a decade ago.

Fifth, the new projects recognize as fundamental that the new competitive context requires a range of new assets for the participants, with major additions to organizational and social capital, managerial skills, to human capital, to financial, and to physical capital. A major challenge is that the whole set is needed as they are complements, not substitutes. One can do the training and see failure due to bad roads, or provide the necessary credit but not meet the contract obligations due to the weak functioning of the local economic organizations, or produce excellent goods but fail to extract a profit due to poor management and marketing skills. These are costly commitments for projects. The projects studied undertook many innovative ways to leverage their resources by tapping into municipal and state governments, national training and technical assistance agencies, other projects, and the resources of the communities in which they work. Such savvy networking for the purpose of leveraging diverse “hard” and “soft” resources, together with “adaptive management”, must be the wave of the future.

Sixth, the rural non-farm sector is largely uncharted territory for the world of rural development projects. The projects studied are innovative and bold, but recent in origin. Moreover, there tends to be a lack of institutional support at the national government level for rural non-farm employment initiatives; that is because this category of initiative “falls between the cracks” between, for example, the Ministry of Industry or of Tourism and the Ministry of Agriculture or of Rural Development. It is beyond the scope of this document to analyze alternatives for the creation of an institutional “home” for rural non-farm policies and programs in national or regional governments. The interventions studied here did show, however, that important policy and program actors are in fact the regional and municipal governments, whose preoccupation with development of their local areas seems to tend to encourage or at least provide a propitious setting for inter-sectoral action.

Finally, many of the practices that we identified as innovative and useful are also largely unevaluated in a rigorous cost-benefit way. Our case studies were necessarily limited by time and budget, and were thus mainly qualitative, and did not permit systematic study of potential counter-factual scenarios (what would have happened in the absence of the interventions). In particular, the projects are heavy on subsidies; it appears to cost a lot to create new RNF jobs, perhaps more than farm sector jobs. But the demand for RNF products is growing faster than that of farm products as Engel’s Law predicts, and this means that moving into the RNF promotion area for projects will require either more efficiency or more budget or both, and certainly a keen eye to building economic sustainability of the private activity initially promoted by the public projects.

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