Decentralization and Urban Infrastructure Management Capacity

Background paper for

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1.0 OVERVIEW

This background paper is based on an extensive review of infrastructure initiatives implemented since the early 1990s in different economic, social and cultural settings. Recent trends are assessed and creative approaches presented. In each case, the challenges faced and the context within which infrastructure problems have to be addressed determined the range of options and the choice of strategies. The remarkable results achieved by Best Practices are highlighted with a special focus on the ingredients underlying their success.

1.1 Decentralization and Infrastructure Policy

Since the late 1970s, countries in different regions of the world have pursued their own path towards decentralization. This path was shaped as much by historical legacy and cultural tradition as by their contemporary administrative structure, political system, and economic opportunities. Despite these differences, there is a degree of convergence among the stated objectives underlying the decentralization process:

- Reducing disparities among regions, with a special emphasis on rural development in Asia and Africa;
- Providing flexibility to respond to the different local and regional problems and opportunities;
- Improving local governance through increased autonomy and better accountability;
- Mobilizing private resources for local development; and
- Empowering people in the development of their communities.

Infrastructure plays a key role in achieving these objectives. Regional particularities, ethnic diversity, democratic local governance, and the inability of central governments to reach the very poor are driving communities to demand a stronger voice in their own development. In many ways, these same forces are also driving the decentralization of infrastructure services as a critical component of local economic development and the key to improving local conditions.

Decentralization entails fundamental changes to the structure of intergovernmental relations, involving a shift away from vertical hierarchies to a differentiation of roles and the reallocation of functions among actors operating in the same sector or territory. Political pressure, rather than economic considerations, is driving the pace and degree of devolution. In the early stages of the process, an appropriate balance among administrative, political, and fiscal decentralization has rarely been achieved. In Eastern Europe, political autonomy preceded economic decentralization and control over expenditures preceded control over revenues. In Latin America and Africa, political autonomy was granted prior to fiscal decentralization. In this respect, South Africa is a particularly interesting case having institutionalized in 1994 a policy of comprehensive administrative, fiscal, and financial decentralization granting a high degree of autonomy to provincial and local governments.

Institutions are affected by changes in the macro- and micro-environments within which they operate. Worldwide, since the early 1990s, these contexts have undergone rapid and profound changes. The extent of decentralization depends primarily on the ability of central government to devise an appropriate regulatory framework for central-local relations and its willingness to provide localities with assets and intergovernmental transfers rather than budgetary allocations. These same factors are shaping infrastructure policies and programs.

1.2 Decentralization of infrastructure services

The reallocation of functions related to planning and management of infrastructure typically has been guided by the concept of subsidiarity: decisions regarding services should rest with the entity of governance closest to the community that is able to deliver these services in a cost effective way while minimizing the externalization of environmental and social costs.

Technological advancements in the infrastructure sector have improved the efficiency of providing services for smaller jurisdictions and market areas, thus allowing for a greater degree of decentralization than was possible a few decades ago. This has made it easier for local entities, including private operators and NGOs, to participate in the delivery of infrastructure services. They are now better equipped to respond to community needs, priorities for services, and preferences for technology and service standards, thus creating a more direct link between the incidence of benefits and costs.

Decentralization has usually led to increases in public expenditures on infrastructure. Size, diversity, wealth, mobility, income inequality, and social exclusion have all been viewed as determinants of increased demand. Issues relating to efficiency, equity, competition, and performance are addressed in depth in publications on the economic aspects of infrastructure and decentralization, particularly in current working papers by international and bilateral development aid organizations and other specialized institutions.

The general approach to infrastructure management in decentralized institutional settings is to unbundle provision in terms of decision-making and management in accordance with the particular characteristics of each service and to allocate responsibilities accordingly. These include the following: network planning, system design, choice of alignments, service standards, project priorities, construction of physical plant, and operation and maintenance of services. Regulating, financing, and undertaking each of these functions for the different services are important aspects of decentralization and need not be the responsibility of a single actor. The assignment of these functions varies among countries according to institutional and policy frameworks, and also between jurisdictions and communities in response to need, means, and the various actors from the public, private and NGO sector operating at the local level. Coordination among decision-makers and providers concerned with primary, secondary and tertiary infrastructure ensures the productivity of investments.

1.3 Expanding the scope for private sector involvement

Entrepreneurial skills, efficiency in management, and the ability to perceive, assess and capitalize on the opportunities created by the decentralization of infrastructure are

increasingly prompting the private sector to participate in financing, implementing and managing infrastructure services. The adoption of creative business solutions and innovative financial packages have combined cash flows and negotiated incentives (tax abatements, financial guarantees and concessions) to ensure the profitability of these undertakings.

The privatization of infrastructure has in no way diminished the public role in the sector. At all levels of government, this role has shifted from provider to enabler, with an emphasis on the ability to act as:

- Regulator, monitoring service quality, ensuring equitable access and limiting monopolistic pricing;
- Catalyst, providing incentives and streamlining procedures regulations; and
- Partner, contributing to project finance directly or through incentives and credit enhancements.

Partnerships or project-based joint ventures range from outsourcing design and/or construction to private firms, to contracting management of existing systems or granting operating concessions to specialized enterprises, to privatizing new service delivery through BOT and BOOT agreements, and to outright sale of assets to private companies.

1.4 A growing role for NGOs and civil society

Pervasive difficulties in securing financing for infrastructure investments and in building the capacity of local governments to deliver services in many parts of the developing world has prompted poorer households to seek access to services through collaborative action at the community level. This situation is leading to a gradual shift towards partnerships between local governments, NGOs and CBOs. In many ways, these partnerships are the hallmark of the infrastructure projects highlighted in this paper and constitute the cornerstone of successful local development initiatives.

1.5 Challenges in the decentralization of infrastructure

Paralleling the common features outlined above are recurrent challenges which central and local governments in different countries and regions have to address:

- Overcoming a tradition of centralized administration entrenched through state control, colonial rule and centralized planning systems. This legacy is reflected in regulatory and fiscal controls, which can still be rigid enough to constrain local government's ability to exercise statutory powers. In particular, the reluctance of central governments to devolve control over revenues and the allocation of resources has adversely affected infrastructure services;
- Balancing the emphasis placed on economic growth and industrialization guided by central agencies with concerns for social equity and inclusion, which are best addressed at the local level;
- Tempering the priority given to managing the macro-economy, especially in the aftermath of debt or financial crisis, to give localities a space for innovation and creativity. Even in decentralized systems, monetary and fiscal policy has tended

to reinforce central oversight through targeted transfers, curbs on borrowing, caps for particular categories of expenditures, and limits on discretion to reallocate funds among budget categories. All of these policy measures affect local capacity to implement infrastructure projects. In 1997, OECD and other international organizations voiced concern over the potential impacts of fiscal decentralization on China's capacity to manage its macro-economy and to finance large investments in productive infrastructure;

- Addressing problems of coordination among public agencies, private enterprises, NGOs and CBOs delivering services within the framework of integrated local development programs;
- Reinforcing the capacities of local governments and communities to discharge the responsibilities devolved to them as their role expands in a decentralized institutional setting;
- Building awareness among local representatives and community leaders of the broader economic, social and environmental issues which are affected by infrastructure decisions; and
- Putting in proper perspective concerns regarding the ability of local leaders and officials to preempt or influence resource allocation decisions to serve their own private interests. These concerns should not be allowed to overshadow the fundamental role of civil society in defining priorities, allocating resources, and managing services at the community level.

Most localities in developing countries are ill equipped to address these challenges. Demographic pressure in South Asia, sharp fluctuations in the domestic economy and urban violence in Latin America, and political instability and civil strife in Africa are exacerbating deficiencies in infrastructure; inequities in access to services; environmental degradation and the lack of funds for capital investments.

Several recent initiatives addressing these challenges are described in the following sections, grouped under three main themes:

- Decentralized institutional frameworks, participatory processes and capacity building
- Financing investments in infrastructure: the expanding scope for intermediary institutions and public/private partnerships
- Equitable access to infrastructure and the empowerment of poor and marginalized communities

2.0 DECENTRALIZED INSTITUTIONAL FRAMEWORKS, PARTICIPATORY PROCESSES AND CAPACITY BUILDING

Development banks, international and bilateral organizations, and donors have been the traditional source of funding for large infrastructure projects in developing countries and transitional economies directly or through financial intermediaries, particularly municipal finance institutions. These organizations have had and continue to have a major influence on decentralization, infrastructure policies and municipal development programs. Funding is often linked to reforms in fiscal and administrative policies affecting intergovernmental relations and the promotion of

market-oriented approaches to infrastructure provision and delivery of urban services. These organizations have displayed a marked preference for the creation of special institutional arrangements and entities to oversee implementation of agreements if not directly implement projects.

Working outside the existing framework of line agencies allows the programs they sponsor to proceed unencumbered by bureaucratic red tape and interference. It also insulates the special purpose entities from the politics and activities of other actors operating within the same geographic or sectoral territory. The special status these entities often enjoy hampers their integration in existing institutional frameworks, thereby compromising their efficiency and viability in the longer term.

As they moved away from sectoral to integrated approaches promoting sustainable development, poverty alleviation and environmentally sound management of natural and cultural resources, international and bilateral organizations have sought improved performance and accountability in governance, increased participation by the private sector, and a larger role for civil society in the development process. They have gradually reoriented their approach to include a range of institutional arrangements emphasizing the role of intermediary institutions capable of managing programs that meet international guidelines, procedures and scrutiny. These new approaches focus on building the capacity of local government and encouraging participatory processes.

2.1 The role of regional and intermediary institutions

Worldwide, infrastructure programs of significant scale have highlighted the need for partnerships among the different levels of government, intermediary institutions, and community-based organizations. Strengthening the role and capacity of regional entities enhances their effectiveness as sponsors, partners, catalysts and facilitators in local development and infrastructure programs.

The Municipal Development Project in Sindh, Pakistan, built up the role of the Provincial Government to provide an enabling environment for fragile municipalities which have to rely on their own resources to finance their development expenditures. Alarming deficiencies in infrastructure hindered the implementation of local development programs, resulting in a marked decline in the region's GDP. By streamlining operations to improve the efficiency of public expenditures and discontinuing the practice of overdrafts to finance operating deficits, the Provincial Government redirected resources toward the long-term finance of productive infrastructure. In Karachi, water supply projects involved local elected representatives in decision-making and enlisted their efforts to reach out to their constituencies. This strategy increased willingness to pay for services, as the quality of these services improved. Collection rates have increased despite a fourfold increase in the average water charge over five years.

In the face of mounting deficiencies in its infrastructure services, the municipality of Bauan in the Philippines decided to participate in the national Municipal Development Program (MDP) to build its capacity to deliver services and access financing. Prior to seeking funding for specific projects, the municipality opted to first build its institutional capacity and adopt effective managerial and fiscal

procedures meeting MDP criteria. Participation in the MDP enabled the municipality to engage in sound investment planning for the effective expansion and upgrading of its infrastructure. A demand driven approach to project selection ensured responsiveness to local needs and priorities, greater impact on the local economy and high levels of performance by the Local Government Units (LGUs) responsible for preparation and implementation of the selected projects.

The commitment of stakeholders was crucial to success. A participatory approach to local governance allowed LGUs to prepare investment proposals reflecting local needs and priorities. Rather than pre-selecting projects likely to be financed by the MDP, only those projects prepared by the LGUs were submitted for funding. Improved distribution of piped water supply reduced the incidence of water-borne diseases. Improved roads, drainage and flood control systems resulted in greater accessibility and increased property values. Market facilities and stalls were upgraded, enabling vendors to expand their activity. The rate of return for the project exceeded the 10 percent lower bound established by MDP and reached close to 14 percent for the public market component[1].

2.2 Strengthening local government leadership and initiative

Decentralization has given local governments the discretion and scope they need to take a lead role in responding to the challenges of economic downturn, degradation of the urban environment, and social hardship. They institute bold initiatives and innovative practices. Western European nations have put in place sophisticated frameworks to provide local governments with technical and financial assistance. The European Union supplements these national programs with coordinated assistance aimed at promoting economic development, assisting distressed localities and fostering social inclusion. Infrastructure is an important component of these programs.

In Jerez de la Frontera, Spain, strong local government leadership and active community participation were key to implementing an integrated plan involving urban planning, infrastructure, and economic development. Despite its location in an industrialized province, Jerez' economy relies on wine production which, in recent years, has been declining. Weak community participation, inadequate infrastructure, poor accessibility to regional resources, and an unskilled labor force compounded the effects of massive job cuts in the wine industry. To address these problems, Jerez launched a new strategy for economic recovery in 1993, shifting the emphasis from seeking to attract investments from sources outside the municipality to fostering local integrated development.

The 1993 integrated plan calls for economic diversification, and improved infrastructure and communications. The strategy seeks to capitalize on the development of an airport, logistics hub and railway terminal, and improve existing

[1] In 1997, Bauan received international recognition as a Best Practice in Urban Infrastructure Development at the Second International Expert Panel Meeting on Urban Infrastructure sponsored by the United Nations Center for Regional Development (UNCRD) and the Urban Management Program-Asia (UMP-ASIA). In 1998, the municipality of Bauan was also selected as a Best Practice under UNCHS/Habitat Best Practices and Local Leadership Program.

roads connecting Jerez to Cadiz to facilitate access to the region's resources. With regard to economic development, the plan focuses on the development of cultural tourism and the promotion of entrepreneurial activities.

Access to structural funds for economic reconversion from the European Union allowed Jerez to implement its integrated development strategy, improving infrastructure and enhancing the local environment. Unemployment fell by 8,000 from 1991 to 1992, the number of tourists has increased to 120,000, and 4,600 jobs have been created in the small business sector. Underlying Jerez' success are seven key factors[2]:

- A dynamic local government leadership;
- A coherent strategy, acted upon with determination;
- A healthy climate of cooperation with business;
- Local government's investment initiatives to jumpstart the stagnant economy;
- Creative use EU funds funds to implement local policy;
- Efficient municipal administration; and
- Coherent links among urban planning, infrastructure and economic development.

2.3 Partnerships between municipalities and NGOs

Partnerships with municipalities has provided the best channel for the participation of communities in the organized delivery of public services and paved the way for the growing role of NGOs and CBOs in this sector in urban and rural areas and different regions of the world.

Albania, one of the smallest and poorest countries in Eastern Europe, has experienced a transition marked by sharp economic swings and periods of civil strife. The early phases of decentralization witnessed the transfer of political autonomy, and limited administrative and fiscal authority, to local governments. Inadequate legislation outlining central/local responsibilities, scarce financial resources, and deficient infrastructure strained the capacity of local governments to manage urban services. In January 2000, the government promulgated a national Strategy for Decentralization and Local Autonomy which includes laws to strengthen the autonomy of local governments and increase their capacity to manage local infrastructure and services.

In the absence of fiscal resources to improve infrastructure in urban and rural areas, the government, with donor assistance, initiated community-driven development strategies to provide infrastructure services based on a cost sharing formula and to set up participatory management structures. In Tirana, sustained population growth since 1991 led to rapid expansion of the urbanized area, resulting in the proliferation of informal settlements. With an estimated population of 575,000 in 1997, 6,500 families were seeking new housing each year. Local government, even with central transfers, could accommodate only five percent of the demand for new infrastructure.

[2] Jerez received recognition for its achievements from the Organization for Economic Co-operation and Development as one of three Best Practices under the Local Economic and Employment Development Program (LEED).

Supported by donor assistance and international and local NGOs, the city initiated a community-based development strategy in the informal settlement of Berglumasi. The program brought together local government teams, NGOs and residents to formulate a development plan for the neighborhood, define priorities for improvements, and determine equitable cost-sharing formulas to finance infrastructure. This partnership led to the upgrading of roads and electrical networks, the construction of community buildings and schools, improved public spaces and programs for youth. Clarifying the legal status of residential land and formalizing an urban plan resulted in the sufficient leveraging of community and household resources to provide infrastructure and build new housing.

In 1997, the experience was expanded to a citywide effort and was subsequently funded by the World Bank. As the local government teams and NGOs gain experience and residents begin to trust the local government, the Tirana Land Management Program is scaling up and expanding to other formal and informal residential zones in Tirana[3].

Similar community-based initiatives were structured in rural areas. As part of an IDA funded Irrigation Rehabilitation Project, 250 Water User Associations (WUAs) were created to manage irrigation and drainage systems. By mid-1999, the project had positively impacted agricultural production and increased rural incomes by an estimated $400 to $600 in the average annual income of a farm family.

In 1997, the government permitted the transfer of primary system management responsibilities to WUAs on a pilot project basis. To date, three pilot projects involving 31 WUAs have been implemented. Service has improved and cost recovery increased through cost sharing. An effective local leadership has emerged, capable of managing water resources and ensuring equity in the allocation of water rights. Building the capacity of the WUAs and allowing them to set irrigation charges restored trust in partnering with government. Finally, the engagement of senior government officials in the dissemination of project information secured commitment among communities and farmers.

In the more challenging context of Sub Saharan Africa, Tanzania's Local Government Reform Act of 1996 granted local governments a high degree of autonomy with some control over financial resources. Donors are funding 96 percent of the cost of the reform through a centrally administered Common Basket Fund channeling resources to local authorities. However, the inability to generate local revenue has undermined the effectiveness of local government. To address this challenge, the city of Dar es Salaam has adopted a "Two-Point Strategy", incorporated in the Community Infrastructure Program (CIP):

- To work closely with Community-Based Organizations so as to enhance their capacity to participate in development programs and strengthen the City Council's capacity to respond to requests from communities; and
- To adopt a new approach to Environmental Planning and Management based on capacity building.

[3] The Center for Urban Development Studies at Harvard University provided technical assistance and training for this initiative funded by the World Bank and USAID.

The CIP upgraded infrastructure, enhanced participation, and built the capacity of CBOs and stakeholders. CIP strengthened institutional capacity by establishing program offices in each community, forming steering committees made up of representatives from all stakeholder groups, and formalizing institutional links between the relevant partners and communities through Memoranda of Understanding. Adequate and transparent information for decision-making and monitoring of performance among the stakeholders altered attitudes and understanding of roles and responsibilities. Communities have agreed to earmark part of their income toward the improvement of infrastructure. Involving CBOs and other stakeholders as partners in urban development ensures the sustainability of these assets[4].

2.4 Community-based approaches to infrastructure services and neighborhood revitalization

Democratic local governance is a prerequisite to the meaningful decentralization of infrastructure management. When people participate in defining visions for sustainable development for their communities, in formulating strategies for equitable access to services and resources and in setting priorities for action, they readily commit to support the activities they have endorsed. Participation also sharpens their awareness of the interrelations between economic, social and environmental issues. This is a highly significant feature of infrastructure programs and carries important implications for local development.

Poland is viewed as the flagship of Eastern Europe with regard to decentralization. In 1990, Poland passed the Law on Local Self-Government, granting autonomy to local governments. Specifically, the Law transferred to municipalities the authority over housing, health services, social assistance, energy and heat, local transport systems, water supply and sanitation, kindergarten and primary education, public order and fire protection, land use, and environmental protection. Sustained political pressure and the demonstrated capacity of municipalities to manage their responsibilities were the driving forces for local administrative and fiscal autonomy. Initial assessments suggested that decentralization did improve the quality of service delivery and foster a new, user-oriented attitude, facilitating the transition from a centrally planned to a market economy. In 1998, Poland adopted a set of reforms to enhance regional development and democracy through the creation of new regional and subregional entities and the reassignment of responsibilities and roles. Sixteen regions and 272 counties were established as a coordinating framework for the 2,489 municipalities. These reforms increased the proportion of public funds controlled by democratic local institutions from 20 percent to 60 percent.

The creativity and commitment of municipal councils and staff since 1990 is demonstrated in the experience of Lublin, Poland. Two lower income neighborhoods—Bronowice and Kosminek, housing a population of 6,000—had

[4] In 1998, the Community Infrastructure Program was recognized as one of 10 Best Practices worldwide to receive an award for excellence in improving the living environment under UNCHS/Habitat Best Practices and Local Leadership Program.

suffered progressive deterioration. Dwindling central transfers and tight budgets necessitated the mobilization of community resources to improve the urban environment: a new approach in Eastern Europe. The main objective was to build a new working relationship between residents and city officials, based on a shared vision of the future and "a lasting trust". Because the districts were designated as urban renewal sites, residents in the older zones could not upgrade their infrastructure and households in the unserviced extensions could not connect to existing networks. Repairs to buildings were also prohibited, except in the case of roof leaks. This state of affairs lasted over 30 years, resulting in resentment and distrust of municipal authorities.

In 1992, the city's Urban Planning Unit decided to initiate participatory process to rehabilitate and revitalize the districts. The process required an extensive outreach effort, involving consultations with every household. Regularly scheduled public meetings were held, and gradually, residents became aware of the role they could play in shaping the future of their neighborhood. In December 1993, the City Council adopted a new strategy to stimulate local investment in infrastructure and buildings based on partnership between the city and the residents. The Act for Support of Local Investment committed the municipality to cover 50 percent of the cost of water, sewerage and power lines, 70 percent of the cost of roadbeds and sidewalks and 100 percent of the cost of drainage and street paving. The cost sharing formula can be modulated to take into consideration issues of equity and cost burden. As an incentive to private rehabilitation of buildings, investors are granted a three year exemption from property taxes.

In 1994, the partnership between the municipality and the residents was institutionalized through the Local Initiatives Program to ensure its continuity as a citywide development strategy. The key features of the program are:

1. Introducing participatory planning and community-based development processes through neighborhood development committees and street representatives working in partnership with the City;
2. Creating an enabling environment for private investment;
3. Empowering citizens to pursue their own self improvement;
4. Promoting privatization of the housing stock and fostering the development of micro-enterprises;
5. Ensuring the sustainability of activities initiated; and
6. Promoting the replicability of successful initiatives.

As of 1998, 391 existing houses have been partially or fully renovated and 87 new ones have either been completed or are in advanced stages of construction. Only 6 shops existed in the neighborhoods before regularization—today, 123 shops are operating in rehabilitated buildings. The changing image of the area is attracting private developers and investors interested in vacant parcels close to the city center.

Lublin's Local Initiatives Program demonstrates that community based development processes adapted to the dynamics of the local economy can ensure the sustainability

of infrastructure upgrading and economic revitalization efforts through strategic public investments, partnership with the community and empowerment of residents[5].

In Latin America, widespread inequities in access to land and infrastructure have led to the proliferation of unserviced settlements, uncontrolled squatterization in hazardous zones, and encroachments of environmentally sensitive areas. Widening disparities in the distribution of income and wealth are aggravating poverty and exacerbating the marginalization of vulnerable segments of the population. In this context, access to infrastructure services is a critical component of strategies fostering poverty alleviation and social inclusion.

The Cotacachi Canton ranks among the three poorest zones in Ecuador, with 80 percent of the Canton population of 35,000 living below the poverty line mostly in rural parishes and scattered remote settlements. Lack of access to land and the ongoing process of fragmentation of family holdings have led to widespread poverty, prompting out-migration. To meet these daunting challenges, the Canton democratized its planning and management procedures. This process allowed the Canton to build consensus, prepare a development plan, allocate municipal funds equitably, leverage additional resources and improve infrastructure and living conditions. The participatory municipal management process was institutionalized ensuring representation of women and marginalized groups (See Box A).

A. Democratization of Municipal Management for Equitable and Sustainable Development in Cotacachi Canton, Ecuador

In 1996, the first Indian elected official in Cotacachi Canton, Ecuador, initiated a citizen participation process to promote equitable and sustainable economic development, fight poverty, and improve standards of living. A Canton Unity Assembly was established as a forum bringing together the different stakeholders from urban and rural areas to discuss problems, propose strategies, define priority actions, and prepare a "Canton Development Plan" with technical assistance from the Urban Management Program in Latin America (PGU/LA). The first Assembly met in September 1996 and brought together around 250 participants, representing the different interest groups in the Canton.

At its annual meeting, the Assembly elects the "Canton Development and Management Council", responsible for monitoring compliance with guidelines set by the Assembly and updating the Development Plan. The Assembly also evaluates performance, defines policy guidelines for each budget year, and assigns roles and responsibilities among the different participants, including the municipality and the different community groups, with an emphasis on citizens' contribution.

[5] In 1996, Lublin's Local Initiatives Program received international recognition when it was selected as one of 10 Best Practices worldwide to receive an award for excellence in improving the living environment under UNCHS/Habitat Best Practices and Local Leadership Program. The Center for Urban Development Studies at Harvard University provided Lublin with technical assistance and training funded by USAID.

In the initial phase, the stakeholders discussed the problems and challenges facing their Canton and classified them in four categories. Infrastructure was a key aspect in each category. *Social problems* included illiteracy, worsening health conditions, out-migration, fragmentation along ethnic lines and isolation due to deficiencies in infrastructure, all of which created a lack of social cohesion and a deep sense of insecurity. *Economic problems* affecting productivity included small indigenous farm-holdings, limited production and marketing capacity, lack of access to credit and deficiencies in infrastructure. The latter affected living and working conditions, particularly in rural areas, and hampered the potential for environmental and cultural tourism. *Environmental problems* included river pollution and inadequate river basin management, deforestation, and deficient solid waste management in populated centers. Finally, *Administrative problems* included lack of technical capacity, low level of citizen participation, and inadequate municipal resources. Workshops and zonal meetings, held over an eight month period, built the consensus needed to prepare the Cotacachi Canton Development Plan. The document is a strategic framework guiding action and it is constantly updated with contributions from the different sector committees.

Five committees, referred to as "Sector Harmonization Tables" were structured to work on priority sectors: health and education, tourism and production, environmental and cultural resources management, and community organization. The five committees present proposals and priority actions to be incorporated in the Development Plan. Their inputs resulted in the implementation of several development projects. The participatory process has been institutionalized and the Canton Unity Assembly legalized by a Municipal Ordinance enacted in January 2000.

Equitable participation of the different stakeholders is ensured, with a special emphasis on the representation of women, rural people, marginalized groups, and children and youth. Women's participation reached was 40 percent in the Assembly and 20 percent in the Development and Management Council membership. Historically marginalized groups, such as the Mestizo and Negro communities, are equitably represented in the Assembly and Sector Committees, as are geographically isolated inhabitants of remote rural parishes. Finally, a special "Children and Youth Table" has been formed and the Canton's First Children Congress is being organized.

The size of the municipal budget doubled as international organizations and, more importantly, the community itself contributed funds for social investment projects. At present, municipal funds cover 57 percent of the total budget, support from international organizations 27 percent and community contributions 16 percent. A large proportion of the resources is being allocated for priority infrastructure projects to improve living conditions. The participatory process succeeded in building consensus on issues of cost and quality, and potable water rates were increased to improve the service. In 1997, sanitation was declared a primary concern and resources directed towards investments in sanitary improvement and community health programs. Most recently, ecology came to the forefront and additional resources have been allocated for the sustainable management of natural resources.

In June 2000, the Cotacachi initiative received international recognition through the UNCHS/Habitat Best Practices and Local Leadership Program as one of 10 Best Practices worldwide in improving the living environment.

3.0 FINANCING INVESTMENTS IN INFRASTRUCTURE: THE EXPANDING SCOPE FOR INTERMEDIARY INSTITUTIONS AND PUBLIC-PRIVATE PARTNERSHIPS

Devolving the management of infrastructure to local governments without granting them an adequate tax base to support the associated costs has led to serious service deficiencies or total collapse of the systems and loss of physical assets as a result of overload and lack of maintenance. Similarly, decentralizing services, requiring high levels of expenditures on operation and maintenance, can burden municipalities with demands exceeding their managerial, financial, and technical capabilities. Furthermore, integrated local development programs require municipalities to simultaneously implement several projects, which can overwhelm local institutional capacity, compromising sustainability of development efforts.

Partnership for joint provision by different levels of government, combined with capacity building and resource management programs, is a viable strategy in the shorter term. It allows for a progressive increase in the local component and in the involvement of communities. Assurance of commitment and leverage from higher levels of government encourages the private sector, including commercial banks, to participate in project financing. Central and provincial support to municipalities has usually taken the form of capital grants for specific infrastructure projects or particular categories of capital expenditure. To attract private investment, tax incentives, credit enhancements, and guarantees have been widely used.

Feasibility studies for larger projects usually include an assessment of life cycle costs. Operation and maintenance implications can then be matched with the revenues which entities assuming responsibility for the service can realistically be expected to generate. When revenues fall short of covering the recurrent expenditure on operation, maintenance, and debt service (if any), central or provincial governments have to fill the gap at least in the short term. This situation, when allowed to continue over prolonged periods, has cumulatively led to increased national budget deficits, prompting curbs on the fiscal discretion of local government. A resource mobilization strategy has to be put in place to ensure continuity in the delivery of services and sustainability of the infrastructure assets.

3.1 Public/Private partnerships to finance infrastructure

Public/Private partnerships have come to the forefront as an effective mechanism to attract private investment and mobilize local resources. In China, decentralization has allowed localities to experiment with different infrastructure financing schemes, backed by liberalizing legislation of the water sector. Decision-making powers have been reallocated across the five layers of government—national, provincial, prefectural, county, and community. Regulatory and planning authority has remained with higher levels of government responsible for capital investments. Management and maintenance are assigned to the lower levels (counties currently manage 77

percent of all projects). The Water Policy Act of 1988 regulated use rights and payment and maintenance responsibilities of users. The Water Industry Policy Act of 1997 offered incentives to private businesses to participate in the water sector, thereby enabling the establishment of financially independent utilities through public-private partnerships.

The City of Chengdu has taken advantage of these liberalizing acts to finance badly needed investments to the water supply system. Sponsored by the Asian Development Bank, the Chengdu water supply project is the first BOT (build-operate-transfer) project in China. CBDEM, a joint-venture company between the french *Compagnie Générale des Eaux Sahide* and *Manubeni Corporation* of Japan, will design, build and operate the system (See Box B).

B. Public-Private Partnerships in Chengdu, China

With three million urban residents, Chengdu is the political, cultural, financial, and educational center of southwest China. Located between the Fu and Nan Rivers, Chengdu relies on both the Duijiangyan Irrigation System and Yangtze River System for its water needs. During the 1990s, increasing agricultural and urban demands on water, arising from rapid growth, liberalization, and industrialization, transformed Chengdu into one of the most polluted cities in southwest China. Industrial effluent, raw sewage, and intensive water usage created severe shortages, undermined water quality and caused widespread environmental damage. Squatter settlements on the riverbanks exacerbated the situation.

Chengdu adopted the "Fu and Nan Rivers Comprehensive Revitalization Plan" in 1993 to strategically guide the use of water to meet social, environmental, and economic objectives. A major section of the river has been rehabilitated through the renovation of bridges, drainage channels, and dykes and improved oversight of more than 1000 polluting enterprises. Affordable housing has been provided to resettle 30,000 squatter households. Thirteen new public parks have been created along the riverbanks, transforming the banks into recreational open space.

In a first phase, the municipality earmarked a substantial portion of its annual budget to meet the project's cost of US$360 million. It established partnerships with public organizations, schools, education and research institutions, neighborhood associations and private investors, including real estate developers and construction companies. In the second phase, the municipality is experimenting with the first BOT project in China. Sponsored by the Asian Development Bank, the project involves the construction of a water treatment plant. CBDEM, a joint-venture company between the french *Compagnie Générale des Eaux Sahide* (a member of the Vivendi Group) and the *Manubeni Corporation* of Japan will design, build and operate the plant which will increase Chengdu's potable water supply by 40 percent. The distribution network will be expanded beyond the 1.8 million people currently served.

The utilization of local resources and the participation of stakeholders in project development and implementation were seen as crucial to its success. The municipality established a framework for the participation of representatives from the

planning, construction, land administration, and environmental protection departments, business enterprises, schools, neighborhood committees, scientists, community organizations and residents in the development of a vision for a sustainable future. In all, more than a million people participated through 188 neighborhood committees and 1,291 enterprises and institutions. The city then strategically deployed its own resources to ensure financing of the infrastructure services it required.

In June 2000, Chengdu was selected as one of 10 Best Practices worldwide to receive an award for excellence in improving the living environment under UNCHS/Habitat Best Practices and Local Leadership Program. Separately, the International Council for Local Environmental Initiatives (ICLEI) presented Chengdu with the "Local Initiatives Award for Excellence in Freshwater Management".

Partial government guarantees reduce the financial risks perceived by private sector institutions. In fragile economic and institutional settings, they are an effective instrument to induce the private sector to enter into partnerships with public agencies.

Sub-Saharan African nations face a growing imbalance between the demands for services required by population growth and rapid urbanization, and the financial resources they are able to mobilize. Infrastructure deficiencies have adversely affected economic development and are particularly acute in urban centers where large concentrations of poor households live in slums and squatter settlements. The challenge is to increase the very low current rates of mobilization and leveraging of local resources and use available funds effectively to promote local development. Investment in upgrading and expansion of infrastructure systems as well as operation and maintenance of urban services is critical to the success and sustainability of this development effort.

In Angola, Luanda's population has grown from 470,000 inhabitants in 1975 to more than 3 million today at an annual rate of 7 percent. The living environment deteriorated for lack of infrastructure, urban services and housing. Chaotic urbanization degraded the natural environment and endangered the inhabitants. The scarcity of financial resources made it very difficult to address these mounting problems.

In 1993, an innovative partnership between government agencies (EDURB), the private sector and the community, referred to as the Luanda Sul “Self-Financed Urban Infrastructure Program,” was established to finance and implement badly needed infrastructure services in Luanda. The concept is to grant concession of titles to land and use the private funds mobilized to finance the infrastructure (primary, secondary and tertiary) needed to service the sites. A special Achievement and Management Fund capitalized by receipts from land sales was set up to finance servicing costs.

Laws were enacted to privatize and restitute land formerly held by the State until 1990. The Provincial Government issues land titles in coordination with EDURB which manages the program. In turn, EDURB relies on the technical expertise and

entrepreneurial skills of its private partners (*Odebrecht* and *Prado Valldores*)who prepared the program's financing strategy and business plan and are managing and coordinating land disposal and development in the different sectors of the city.

The strategy was to start by serving the affluent clients capable of prepaying their serviced parcels. The surplus profits after payment of developers' fees and return on investment are used to finance servicing of plots for lower income households who do not have accumulated savings to contribute. The combination of legal guarantees regarding title to land offered by the state and sound business plan submitted by the private developer convinced Oil companies to prepay the purchase of serviced parcels to house their employees, experts and managers. This prefinancing provided the program with startup capital. Bulk infrastructure had to be constructed to service the selected sites and the developer had to contribute supplementary funding to complete the water supply system. The infrastructure included access roads, potable water, electricity, storm water drainage and sanitary sewerage to support development at the standards demanded by the clients.

The social component of the program started with a pilot scheme to resettle 860 families living in shacks in hazardous areas and security zones in downtown Luanda. Today, over 2,700 families have been resettled. Service charges for water and electricity are deposited in a Replacement Fund to ensure sustainability of the services provided.

In December 1999, contracts totaling US$85.6 million had been signed and US$96.3 million in infrastructure investments committed, of which US$16.4 million were allocated to the program's social component. 8 million square meters have been fully serviced, 4,000 jobs were created and local tax revenue has increased. The urban environment is improving through planned urban expansion, revitalization of the city center, rehabilitation of public spaces and protection of the natural landscape and vegetation. Most importantly, the program created a formal, private real-estate market which was non-existent in Angola. It then capitalized on the dynamics of this market to valorize the public land assets it held and to leverage funds based on the future value of the serviced land[6].

3.2 The role of intermediary institutions in infrastructure finance

In Latin America, decentralization has fostered creative initiatives involving intermediary institutions and NGOs. In Colombia, decentralization has given municipalities strong revenue generation powers. Conversely, they have assumed the responsibility for urban services including water and sanitation, streets, education and health. Despite improvements in the volume of local revenue and large increases in central transfers and in the local share of national taxes, municipalities are unable to access long term credit for capital investments on the domestic capital market. Financial intermediaries holding mostly short-term liabilities are reluctant to provide long-term financing, especially to municipalities with no track record of administering

[6] In June 2000, the Luanda Sul program was selected as one of 10 Best Practices worldwide to receive an award for excellence in improving the living environment under UNCHS/Habitat Best Practices and Local Leadership Program.

long-term debt. To address this problem, Colombia restructured in 1990 its Fund for urban and infrastructure development (FFDU) which operated from within a mortgage bank and established a Municipal Development Fund (MDF), known as FINDETER (*Financiera de Desarrollo Territorial*), sponsored by the Inter American Development Bank (IDB) and the World Bank.

FINDETER differs from conventional MDFs through which central government channel subsidized credit to localities in that it does not lend directly to municipalities. It is a second tier lender operating through the banking sector by partially rediscounting loans granted to municipal borrowers (See Box C).

C. FINDETER, Colombia: an Innovative Municipal Development Fund

Financiera de Desarrollo Territorial (FINDETER) partially rediscounts loans granted by commercial banks to municipal borrowers. The banks can borrow from FINDETER up to 85% of the value of loans they extend to municipalities and other sub-national entities. FINDETER's intervention allows commercial lenders to balance the maturity of assets and liabilities and enhances their liquidity. However, the banks assume the credit risk associated with their municipal borrowers since FINDETER does not purchase the loans but rather recapitalizes the institution with liabilities having appropriate maturities. In addition to second-tier lending, FINDETER manages the national government's matching grant program for infrastructure projects including water, roads and schools.

FINDETER, which inherited the staff, experience and project pipeline of its predecessor MDF, has reached close to two-thirds of Colombia's 1000 municipalities in its first three years of operation. It has refinanced loans for the rehabilitation, improvement or expansion of urban infrastructure and services including water, sewerage, roads, traffic management, environmental protection, drainage and flood control, solid waste, slum improvement, education and health facilities. Water, sanitation and roads account for 75% of loan disbursements, institutional development 8%, and schools 6%. Projects must meet specific criteria regarding developmental and environmental impacts to be eligible for FINDETER refinancing.

In addition to its own capital consisting of retained earnings, loan repayments and borrowing from international institutions such as IBRD and IDB, FINDETER issues bonds on the domestic capital market to raise funds and has to offer competitive yields. Despite owning 86% of FINDETER's shares, the national government does not guarantee the bonds. In addition, unlike its predecessor FFDU, local governments and financial intermediaries are not compelled to buy FINDETER bonds by regulation or in order to obtain borrowing privileges.

FINDETER loans carry a variable interest rate and borrowers are charged a service fee. The institution fully covers its operating costs, foreign exchange and credit risks, and produces a positive return on investment. Several measures substantially reduce risk. Commercial banks are liable to FINDETER if their borrowers default, and municipal revenue, pledged as loan guarantee to the banks, can be used to repay FINDETER. Furthermore, the percentage of municipal revenues which can be

pledged is capped and lower bounds are set on debt service coverage ratios. Municipal infrastructure loans cannot exceed a maximum loan-to-value ratio of 70 percent, and a municipality which defaults on a FINDETER-backed loan cannot access new funding through FINDETER.

While the dependence of larger municipalities on FINDETER has decreased as they manage to access competitive financing from commercial banks, FINDETER's mission remains critical to small and medium size municipalities. Given its development mandate, FINDETER offers technical assistance on project design, including the development of business plans, financial forecasts, loan application requirements, and implementation, particularly with respect to contracting and procurement. Larger and fiscally stronger municipalities have managed to secure financing with competitive spreads. To protect the smaller municipalities, FINDETER sets a ceiling on the maximum interest rate banks can charge on the loans it refinances.

3.3 Privatization of infrastructure services: public utility companies

Decentralization and privatization are integral components of the process of transition from a centrally planned to a market economy. In Eastern and Central European countries, local autonomy is a fundamental principle of governance since 1990. Public assets and enterprises are being privatized and the scope for private participation in the infrastructure sector further enhanced by the progressive dismantling of central regulatory controls. Unlike transitional countries in the CIS, Central and Eastern European nations have invested heavily in their infrastructure. Despite these substantial investments, their infrastructure needs to undergo serious modernization and renovation to enable them to compete effectively in the global marketplace. Privatization is being increasingly used as the choice instrument to improve efficiency in the management and operation of services and leverage the financial resources needed to upgrade the quality of the physical plant.

In Romania, public service corporations were transformed into commercial utility companies and public subsidies are being phased out. Privatization has compelled the public utilities to seek more efficient and cost-effective approaches to service delivery and establish partnerships with various stakeholders.

The city of Brasov in Central Romania had to deal with aging infrastructure, and artificially low utility rates which did not cover maintenance and operation costs. Changes in operation and management of water and wastewater services were needed to gradually move towards European environmental quality standards. A utility company "*the Regii Autonome*" was created to manage the services. Technical modifications to water filtration increased water production and wastewater treatment was improved by the installation of a low cost aeration system meeting national environmental standards. Monitoring and planning is supported by a computerized water evaluation system. Finally, changes to the organizational structure improved administrative efficiency.

The success of the *regii autonome* is attributed to the partnerships established among various stakeholders in planning for the improvement of services. The Brasov County Council, the Brasov Prefecture, other municipalities within the region, government departments and agencies, the University of Transylvania, public-owned societies, business representatives, and the Chamber of Commerce and Industry participated in the planning of improvements. The European Bank for Redevelopment and Reconstruction, local finance institutions, and intermediary NGOs provided technical and financial support. An open communication channel facilitated the implementation of an operational plan requiring the city to approve significant increases in utility rates.

4.0 EQUITABLE ACCESS TO INFRASTRUCTURE AND THE EMPOWERMENT OF POOR AND MARGINALIZED COMMUNITIES

Access to land and infrastructure is a powerful empowering mechanism, enabling impoverished and marginalized citizens to improve their income and their living conditions through self-reliance.

Rural development programs were among the first to focus on the economic and social impacts of infrastructure. The programs have included infrastructure services crucial to the development effort, starting with water supply and electrification and extending to education and health facilities. Decentralization has resulted in greater involvement of rural populations. In India, the process has led to the devolution of administrative and financial powers to the units of governments closest to the people. Despite the slow pace of change, local public officials have started to pay greater attention to the needs of the rural poor.

Among urban programs, the most widely recognized is Indonesia's Kampung Improvement Program which, over the course of 25 years, upgraded 11,000 hectares of unserviced slums and improved the living conditions of 15 million people. A program of similar magnitude has been launched in 1996 in South Africa where overcoming the legacy of Apartheid is a daunting challenge.

South Africa's geographic size, ethnic diversity and differences in development levels among regions and localities made decentralization the best approach to ensure responsiveness to local needs and opportunities. Local governments can legally set rates for user charges and property taxes and leverage resources by entering into partnerships with the private sector. Redistribution policies channel targeted central transfers to both provincial and local governments based on prevailing levels of poverty and the state of the rural economy.

A major effort is underway to improve living conditions, provide infrastructure to unserviced and underserviced communities, build up the capacity of smaller and weaker municipalities and provide them with technical and financial support to enable them to develop economically and socially (See Box D).

D. The South African Government's Grant-Funded Municipal Infrastructure Program

The South African Municipal Infrastructure Program, launched in 1996, is one of the largest and most ambitious in the world. The program's mission is to "ensure that all communities have access to at least a basic level of service." The government views municipal infrastructure as a critical component of local development, and the most effective mechanism by which poor and marginalized communities can be empowered. The aim is to promote five key objectives:

- Upgrading the living environment
- Promoting social equity;
- Integrating former apartheid cities and towns;
- Enhancing economic opportunity; and
- Fostering partnership to leverage inputs.

The government made a strategic decision to create a grant-funded program in order to reach the poorest 20% of the population. The program serves urban and rural communities and is structured as a partnership between the state, the provinces and the municipalities to ensure community-driven delivery of services. Decentralized program management was necessary on political and technical grounds to cope with the large number of geographically dispersed and typically small projects.

Despite the overriding priority placed on delivery, the program sought to ensure community participation and structure a constructive interface between communities, municipalities, provincial governments and central authorities. Communities submit project proposals to their municipality for approval, assistance and support. The municipality prepares business plans for the projects and submits them to the Provincial Cabinet for approval, possible additional funding and mobilization of grant funds. Funds for the project meeting the program's criteria are channeled from the national government to the provinces. In turn, the provinces make the funds available to the municipalities and monitor project implementation.

As of March 2000, 48 percent of MIP funds were allocated to water supply, 22 percent to roads, 17 percent to sanitation, 6 percent to storm water drainage, 5 percent to community facilities, and 2 percent to refuse collection. To promote integration and development, the program supports the government's housing scheme by providing bulk infrastructure to new extension zones. Most recently, MIP has been reoriented to allow for the rehabilitation of existing systems.

Impacts on the ground are impressive. Improvements to water supply systems have promoted economic activity and diminished the incidence of water-borne diseases. New and upgraded roads have fostered the development of micro-enterprises and created jobs.

Extensive community involvement is critical to successful project implementation. Communities define priorities, also develop plans, and elect committees to serve as a link to municipal and provincial governments. Several have structured creative financial packages through private-public partnerships and have managed to

maximize local resource mobilization. In general, willingness to pay for services increased as the quality of the services improved.

By March 2000, the program had provided employment totaling 3.7 million person days through the use of labor intensive construction methods and local materials. An impressive total of 272,000 person days had been devoted to training workers, thus enabling them to perform 90 percent of construction activities. At present, a special emphasis is placed on the employment and training of women.

Lack of capacity at the local level has emerged as the single most critical constraint impeding program performance and undermining the sustainability of achievements. The government had at first earmarked 5 percent of MIP project funds for capacity building and training of emerging contractors and workers. This allocation has recently been increased to 10 percent to provide adequate funding for building up local governments' technical and managerial capacity to operate services and maintain infrastructure assets.

By March 2000, South Africa's municipal infrastructure program had implemented 1496 projects for a total expenditure of over US$350 million. MIP funds have provided water supply to 9.3 million rural and urban residents, sanitation to 5.1 million, storm water drainage to 1.7 million, access roads to 3.8 million, community lighting to 1.1 million and solid waste disposal to 0.9 million.

In 1998, MIP was recognized as a Best Practice under UNCHS/Habitat Best Practices and Local Leadership Program[7].

4.1 Community-based financing of infrastructure projects

Recognizing this empowering role of infrastructure, shelter advocacy groups and lately microfinance institutions have initiated programs to enable the poor to access the services they badly need to improve living conditions in both urban and rural settings.

A leader in this field is the Self-Employed Women's Association (SEWA), established in 1972 in Ahmdedabad, India, as a trade union to empower low-income women working in the informal sector (which account for 96 percent of employed women). SEWA has established two institutions—SEWA Bank, a cooperative bank fully owned by SEWA shareholding members, and the Mahila Housing SEWA Trust (MHT) which provides members with legal and technical assistance to improve their shelter and access infrastructure services. By the end of 1999, SEWA had a membership of 220,000 and SEWA Bank had close to 113,000 depositors and 36,000 borrowers with a working capital of just over US$6 million.

[7] The Center for Urban Development Studies at Harvard University undertook a detailed evaluation of the program funded the World Bank and UNDP, in collaboration with public officials and PDG Consultants. The Center also provided capacity building to the program management team at the central and provincial level, and conducted training courses on infrastructure and local development. These activities were funded by USAID and the government of South Africa.

"*Parivartan*"—a citywide Slum Networking Project initiated by the Ahmedabad Municipal Corporation (AMC), involves SEWA, SEWA Bank, and MHT. The project aims to provide families in underserviced slums with infrastructure services, including individual water supply, underground sewerage, individual toilets, solid waste disposal service, storm water drains, internal roads and paving, street lighting and landscaping. Acting respectively as financial and technical intermediaries, SEWA Bank and MHT motivate families to contribute US$48 towards an infrastructure improvement package ranging between US$333 and US$345. In addition, families are required to contribute US$2.3 towards the cost of maintenance, which will be assumed by the community. Local industry matches the family contribution with US$48 and the balance is covered by the municipality, which also provides all Parivartan participants with written documents ensuring security of land tenure for a minimum period of ten years. To help participants meet their contribution, SEWA Bank provides loans of up to US$37 to each family. Loans can be repaid in monthly installments of US$2.30 or as a lump sum and carry an interest rate of 14.5 percent. At this time, 18 slum communities are participating in the program.

For the three settlements where infrastructure improvements have been completed, an evaluation documented an average increase of US$1.15 per day in net household earnings. Fruit and vegetable vendors are able to wash their produce at home and do not have to wait in long queues at public water points. This allows them to get to the market at 6:00 a.m. and spend more time selling produce. Health problems and serious illnesses, including typhoid, malaria, diarrhea and skin disease, have been reduced by 75 percent. In addition, the success of the project prompted members of SEWA Bank to take out a collective loan providing each household with US $575 for home improvements[8].

Similar approaches fostering access to services by marginalized communities are being initiated in many parts of the developing world. In Guatemala, 61 percent of inhabitants live in rural areas, the highest proportion among Latin American countries. The vast majority are indigenous groups living in poverty. Inequitable access to land and infrastructure services perpetuates this situation. It is estimated that less than 30 percent of the rural population has access to infrastructure. INEG, the state-owned enterprise in charge of rural electrification, requires communities to form a committee, submit an application for the service, specify the contribution they are able to make towards the cost and secure a state or municipal subsidy to cover the remainder of the cost. Construction is then undertaken by a private contractor supervised by INEG. To obtain water supply, communities must additionally pay for a report on the quality of local water sources, and commit to maintaining the system. Rural communities, lacking financial resources to meet their cost-sharing obligations, political power to leverage adequate co-funding and organizational skills to manage the process, are unable to obtain services without the assistance and support of intermediary NGOs.

[8] In 1996, SEWA received international recognition when it was selected as one of 10 Best Practices worldwide to receive an award for excellence in improving the living environment under UNCHS/Habitat Best Practices and Local Leadership Program.

Genesis Empresarial was established in 1988 to improve living conditions for low-income rural communities by providing microcredit to finance community-based delivery of infrastructure. The Community Infrastructure Lending Program (CILP) provides technical assistance and financing to help communities obtain electrification and water supply. A government matching grant still has to be secured by the community. Genesis loans are not subsidized. Interest rates reflect the costs associated with different sources of capital. Current rates range from 21 percent on funds from the Central American Bank for Economic Integration BCIE to 30 percent on funds from commercial banks and Genesis' own funds.

By mid-1998, 8,700 households in 189 communities had received loans for electric connections under the electrification program, launched in 1993, and 1,820 families in 21 communities had received loans for water connections under the water supply program initiated in 1995. A prerequisite for participation in the program is that at least 90 percent of residents must agree to the provision of infrastructure. The project is then administered through groups of four to twelve families sharing similar socio-economic characteristics. Loans range from US$120 to US$450 per household.

Collective liability and submission of a documented land title held by one household in each participating group are the only conditions for eligibility. Loan amortization periods range from one to four years, according to the group's income. Repayments are monthly with an option to pay after harvests available for agricultural laborers. In 1998, the CILP repayment rate was just over 92 percent.

Genesis provides assistance in organizing borrowers, registering the project committee, preparing the technical report and cost estimates, filing applications for matching grants structuring affordable repayment terms, filing applications for credit, dealing with contractors, and managing the group loan accounts. Despite the financial burden of technical assistance, CILP managed in 1998 to achieve to a positives return on investment of 1.2 percent.

5.0 CONCLUDING REMARKS

The initiatives presented in this paper illustrate the particularities and shared features of decentralized provision of infrastructure services across countries and regions. The experiences of outstanding programs and best practices highlighted in the different sections of the paper provide ample evidence that dynamic local leadership, sustained outreach, civic engagement, creativity and sound financial management are the ingredients of success. These ingredients allow localities to overcome limiting constraints, ensure delivery of infrastructure services, promote sustainable local development, and foster social inclusion in the most challenging contexts.

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