ANNEX G: URBAN THEMATIC & PROJECT PROFILE BOXES

1. REDUCING CRIME AND VIOLENCE THROUGH INCLUSIONARY APPROACHES TO YOUTH, IN MEDELLIN, COLOMBIA

Medellin is the second largest city in Colombia, with a population of approximately 2.4 million. The city was noted in the late 1980s and 1990s for its extreme levels of crime and violence, perpetrated by adolescent hit-killers ('*sicarios*') and led by the guerrilla groups, para-military groups, drug cartels, and capo Pablo Escobar. Security and justice institutions were failing.

Medellin has achieved much in twenty years. The illicit drugs economy is still prospering, but homicides have steadily and significantly decreased, from 6,349 murders in 1991 to 1,044 in 2008. Other forms of crime have also decreased. Alonso Salazar – the author of the iconic study *No nacimos pa'semilla: La cultura de las bandas juveniles de Medellín* is now Mayor of Medellin. The city is internationally lauded for its innovative urban policies and practices, and recently won the prestigious 'Barcelona Cities to Cities' Award for its city development strategy—*Medellin: la Mas Educada*—led by former Mayor Sergio Fajardo (2004-2007).

Becoming successful has taken its time, and has resulted from a number of initiatives. Civil society, rather than local government, led many of these initiatives, with the support of academia, the private sector, Medellin's Chamber of Commerce, human rights and religious organizations. For example, the *Paisa Joven* program, supported by German bilateral aid, laid the groundwork for an **inclusive approach towards at-risk youth, including strategies to promote juvenile employment**. Another critical city-wide effort was a **Strategic Planning exercise** inspired by Barcelona. In 1991, Colombia **decentralized its governance structures**, and this also benefited Medellin. Furthermore, Bogota's radical urban renovation, under mayors Antanas Mockus (1995-1997; 2001-2003) and Enrique Peñalosa (1998-2000), underlined the potential for **strong local leadership and locally led reform programs**. Finally, President Alvaro Uribe (2002-2006; 2006-2010) has significantly **strengthened Colombia's quantity and quality of security forces**, and meanwhile strengthened—although less so—**the justice administration**.
Medellin's policies towards juveniles and violence **combine long, middle and short term components,** and are **integrated with national government policies and programs.**

- **Long-term policies focus on guaranteeing equal access to quality public services,** with a strong focus on improving coverage and quality of education (from pre-K to tertiary), taking advantage of the fact that public education accounts for 80 percent of the city's students—much more than in most other Colombian cities.
- **Medium-term policies focus on facilitating and enhancing access to cultural development**—including sports, parks, public space, libraries, and museums—by creating new facilities, focused programming, free access and other incentives. These programs are notable because the new libraries, schools, cultural development centers, and other new services are of extremely high quality, and are built in historically neglected parts of the city.
- **Shorter-term approaches consist of a whole range of preventive policies and programs, particularly those working directly with at-risk juveniles.** First, in the context of national DDR policies, the city has reintegrated nearly 5,000 demobilized paramilitary and guerrilla fighters since 2004. Second, a municipal program works with current- and former-prisoners (particularly youngsters) and their families, even though the penitentiaries are all national government institutions in Colombia. Third, since 2008, the city has created a program that

identifies and engages with juveniles at high risk of entering a criminal career and/or joining illegal armed groups. About 3,600 of these youngsters have been identified, and approximately one-third are now participating in this program. All three of these programs—DDR, prisoners, and high-risk juveniles—focus on social and economic reintegration, through personalized professional assistance. This assistance includes eight components: education and training, psychosocial assistance, income generation, work with receptor communities, legal support, institutional strengthening, humanitarian aid, and related research. Constant monitoring and evaluation are core factors in these programs' effectiveness. Two critically important approaches complement this work: (i) victims are the focus of a range of tailored programs, led by Medellin's *Programa the Atencion a Victimas;* (ii) youngsters of poor backgrounds can apply to a variety of grant programs, as the *Delinquir no Paga* (Crime Does Not Pay) program.

Challenges remain. First, **the breadth of the approaches makes it difficult to monitor and evaluate overall effectiveness**. Some institutional reorganization is underway in an effort to redefine institutional responsibilities. Secondly, Medellin's school system—as in most other Colombian towns—uses the "*doble jornada*" (double shift), with the effect that at any moment **a significant amount of school age youngsters are to be found in the street**. Changing to a full-day program for all students would be costly, and priority has been given to improving quality of education for all. Third, in addition to the continued presence of organized crime, Medellin, like Naples and Bari in Italy, and more so than other large Colombian cities, has various **gray economic sectors that generate complex forms of crime, including juvenile crime**: the local market for illicit drug consumption, with many *plazas de vicio*; a growing casino and gambling sector, without clear regulation; loan sharking among informal, small and mid-sized commerce; wide spread racketeering in popular and commercial neighborhoods; private security and protection arrangements. Regulating these gray markets better requires national legislation, which Colombia's lawmakers do not yet seem seriously to be considering.

Contributed by Gerard Martin, author of books on transformation processes in Bogota and Medellin, and Former Director of Colombia Program at Georgetown University's Center for Latin American Studies.

Sources:

Alonso Salazar, J. (1990), *No nacimos pa'semilla: La cultura de las bandas juveniles de Medellín*, Bogotá: CINEP.

Martin, Gerard and Diego Corrales (2009), *Medellin: Transformacion de una Ciudad*, Medellin: City of Medellin and IADB. www.laboratoriomedellin.com/libro.pdf

2. GENDER PERSPECTIVES IN URBAN DEVELOPMENT AND LOCAL GOVERNANCE

In the Financial Year 2008, the World Bank's urban sector has the highest number of projects and financial commitment that include actions for reducing gender disparity. Globally, gender equality action featured in 37 percent of financial commitments (nearly US$ 577 million out of nearly US$ 1.6 billion), and 7 projects out of 26. These projects were in Benin, Ethiopia, Uganda, Indonesia, Vietnam, Bolivia, and Djibouti. Six of those projects used gender-inclusive consultation; four of those conducted a gender analysis; and two of those used gender-informed monitoring and evaluation. Since most of the urban portfolio includes household and community level service delivery, it is easier to recognize gender-based concerns

and disparity, and to make the case for attention to them with a multi-sectoral, community-driven approach.

However, there remains much work to do, and there exists a compelling rationale for increasing the role of gender perspectives in urban development. In general, women's priorities are rarely taken into account in urban policy, settlement planning, or the design of urban programs; and there are often few women in local government. This absence of gender perspectives has real repercussions. Women in cities depend more heavily on public transport than men and use transport in different ways, such as off-peak travel and trip chaining to multiple destinations. A lack of basic services and infrastructure can affect women more than men because women are the primary collectors, transporters and managers of domestic water as well as the promoters of home and community sanitation activities. In many countries women predominate in the informal urban economy, but their needs may not be addressed. Women may remain in abusive relationships when they have no rights to land or property except through their husband—having been excluded from secure tenure due to inequities in cultural norms, legislation, and policy.

In several contexts where women have become involved, they have brought a major impact in curbing local violence and corruption. Women show higher interest in preserving new facilities and are more effective in mobilizing the community to carry out maintenance tasks, resulting in greater sustainability of project outcomes. Women's commitment to solve problems in their communities makes them ideal agents to catalyze urban development project activities. **As the following case shows, the participation of women contributes to cost savings through better use of materials and staff time, resulting in more efficient, higher quality work.**

- **Caracas Slum Upgrading Project (CAMEBA) (1998-2006).** This project aimed to improve the living conditions of people living in the *barrios* in Caracas through community driven infrastructure improvement. There was broad outreach to promote women's widespread participation. Women residents made up the majority of the people attending CAMEBA meetings, initiating proposals for infrastructure projects and serving on project-related activities. Women's participation enhanced the project by improving the quality of public works through their supervision, guaranteeing the maintenance of these works, increasing the efficiency of field staff work and enhancing project effectiveness. Women's participation has helped build institutional capacity in the slums and to increase receptivity to government programs. This participation has also improved household livelihoods and well-being through employment generation for women. Women's have a more equal voice in household decision-making as a result of these activities.
- **Bolivia: Urban Infrastructure Project (FY 2006-2010).** The project aims to achieve sustainable improvements in the urban infrastructure and living standards in the poorest neighborhoods of La Paz through comprehensive urban upgrading. It aims to enhance mobility in the city of El Alto, removing infrastructure bottlenecks and introducing measures to modernize public transport services and urban transport management, and to expand sewerage coverage in poor areas of Santa Cruz de la Sierra. Women's needs have been incorporated into every step of this project, from design and job creation to empowering women through titling and community organization. Due to improved lighting and sanitation, women are safer and have fewer reasons to make trips outside in the dark; the building of childcare facilities and community centers has enabled women to improve their income generating capabilities; and including women's names on the land titles has given

them access to credit, employment and enterprise opportunities that were previously closed to them.

Contributed by Nilufar Ahmad, Senior Gender Specialist, World Bank

Sources:

Ruiz-Abril, Maria Elena (2002), 'Gender in Urban Infrastructure Projects: the Case of the Caracas Slum-Upgrading Project', Washington DC: World Bank.

Personal communication with Miguel Vargas-Ramirez, TTL for Bolivia Urban Infrastructure Project.

Other sources available on request from Nilufar Ahmad.

3. POST-CONFLICT RECONSTRUCTION IN CÔTE D'IVOIRE

Amongst a number of World Bank programs in Cote d'Ivoire, with a total value over $500 million since 2008 alone, an IDA Grant is funding the 'Emergency Urban Infrastructure Project'. This project makes major investments in urban infrastructure and services in Abidjan and Bouaké.

It is designed to support the Ivorian Government's efforts to demonstrate visible and tangible improvements in its citizens' lives—a critical step for sustaining social and political stability and economic recovery in the country. The location of these investments—in the country's major cities—reflects the symbolic importance of both of these cities during the civil war (Bouaké was the 'capital' city of the rebel forces), and the tangible importance of the two largest cities in the country, which have been enlarged further by population displacements during the war.

The project will include five main components, as follows:

- **Urban Water Supply (US$28 million).** Access, availability and quality will be improved through: the provision of **subsidized service connections and standposts** to selected urban areas in Abidjan and Bouaké including informal neighborhoods, and for 225 school classes and eight health centers; the **expansion of water production capacity** in Abidjan; and the **reinforcement and expansion of water distribution networks** in Abidjan and Bouaké. This will provide access to safe water for an additional 330,000 people in Abidjan, and 40,000 in Bouaké.
- **Sanitation/Sewerage (US$15.2 million).** Access to, and functioning of, the sewer network will be increased, and discharge of raw wastewater in the Abidjan lagoon will be reduced by 40,000m^3 per day, through: the **rehabilitation of main pumping stations and treatment plant** feeding the ocean outfall; the **rehabilitation of neighborhood pumping stations**; and the **connection of secondary sewers** to the main interceptor for approximately 100,000 people.
- **Solid Waste Management (US$12 million).** Collection, removal, and disposal of household solid waste in the city of Abidjan will be improved through: **eliminating the main unregulated dump sites** in the city through removal of 500,000 tons of solid waste to a municipal landfill site; supporting the establishment of an **efficient system of solid waste pre-collection, collection, transfer, and disposal**, relying primarily on the local private sector; improving the **routing of waste transfer vehicles** through the rehabilitation of the

Williamsville transfer station; implementing an **outreach campaign on hygiene/sanitation, including an HIV/AIDS component**; and **improving living conditions for those living close to the Akouédo landfill site**.

- **Urban Road Rehabilitation (US$28 million).** Urban mobility and transportation access will be improved through: **restoration of public transportation services** in underprivileged neighborhoods, which had ceased due to poor road conditions; **measures to address congestion and runoff management** at critical locations; **connection of secondary streets to the main network** to ease access from new neighborhoods that generate significant traffic; and refurbishment of **horizontal and vertical signage** to improve road safety.
- **Municipal Contracts (US$7 million).** This element aims to re-energize municipal functions that have largely been taken over by the central government during the crisis, while addressing the medium and long-term problems of cities. Activities under this component will: draw up **an inventory of needs and a priority municipal program (i.e. 'Municipal Contracts')** for an initial group of 10 cities, based on an urban audit and a financial and organizational audit; and support measures **enabling local governments to reassume a portion of their mandate** with a view to normalization and stability.

Source:
World Bank (2008), 'Emergency Urban Infrastructure Project', Emergency Project Paper (EPP), P110020, Washington DC: World Bank.

4. CITY SERVICE DELIVERY SURVEYS IN THE MNA REGION

Five field-based teams of the World Bank worked in conjunction with the Norwegian Social Science Research Institute (FAFO) in 2005-06, to design and implement a Service Delivery Survey (SDS) in the Middle East and North Africa region. **The aim of the exercise was to provide an end-user perspective on potential ways of improving service quality, cost and outreach outcomes.** First, it surveyed end-users to assess their **perception of the quality and coverage of services, improvements that they have noted, and the deficiencies that still exist**. Second, it gauged their **understanding of the service delivery mechanism**, i.e. whether the users feel private sector providers, local governments, central government agencies or other providers are the preferred provider; if so, why; and whether there are general principles that can be derived from the user feedback. Third, it also considered the **costs of provision under alternative arrangements, efficiency gains and inherent subsidies or losses that could be potentially averted under alternative institutional arrangements**.

The purpose of the SDS was to expose central government officials and city-level representatives and staff to cost-effective tools and techniques in consulting their constituents on key service delivery issues. Two methodologies were employed -- focus group discussions complemented by Transect surveys – which, together, provide a window to the overall nature of service delivery in the selected Middle East countries.

The rich and very relevant feedback that was gained through the SDS cannot be appreciated fully without reviewing the

- ***Price-conscious consumers.*** Price figured prominently as a key concern for a large number of service users. But most consumers indicated a stronger willingness to pay for services than might have been expected—as long as price increases correspond with service delivery improvements. Network losses due to theft or poor maintenance and other "free rider"

problems also figured prominently in responses, signaling questions about fairness and uneven enforcement or none at all, which ultimately undermines the entire system.

- ***Good coverage but poor quality.*** The survey indicated high rates of access to services, but lower standards of availability and reliability. In particular, there is a significant gap between having a physical network connection and actually receiving services. And the quality of the service varies: concerns were also expressed about seepage of foreign elements into the water supply, poor road maintenance, erratic solid waste collection, etc. **The clear need for setting *service standards* emerged in these discussions.**
- ***Service providers complain about insufficient revenues to sustain and expand service provision.*** The root problem here is a misalignment of revenue and expenditure assignments within the intergovernmental system. It is worsened by inherent subsidies in system design, an inadequate revenue base, weak revenue collection efforts, and, at times, a sense of entitlement as reflected in both end-user feedback and an analysis of agency collection performance.
- ***Inter-agency policy and planning coordination poses a particular challenge.*** There is a lack of effective coordination between various levels of government and different agencies. Two key reasons for this are the lack of technical and managerial capacities, and the fact that some agencies work at cross-purposes. The duplication of agency remits often translates into multiple interventions in the same location for electricity, water and other under-surface service provision that disrupts and damages roads and other surface infrastructure.
- ***Response to privatization is mixed and guarded.*** Respondents had an appreciation for efficiency and customer responsiveness that comes with private provision, albeit balanced with concerns of job redundancies and tariff hikes. Generally, end-users with greater exposure to private providers had the most favorable response to increasing privatization, as outcomes were generally perceived to be better than the alternative of publicly provided services. Thus it would be desirable to foster a demonstration effect by raising public awareness of private provision options and pilot activities.
- ***Local governments matter, at least to citizens.*** Local governments are still seen by citizens as the principal interlocutors when it comes to service delivery. In most cases, respondents wanted their service provider to be proximate to them, but also to be sufficiently resourced and technically equipped to provide services.
- ***Inadequate planning cited as a major area in need of reform.*** Long-term planning and investment prioritization is lacking in most service delivery entities. This hinders capacity expansions as well as routine maintenance works. Many cities and towns lack updated masterplans; and in many cases, those plans that exist are prepared at the central level, leaving local stakeholders out of the consultation process. Respondents also cited major deficiencies in the application and enforcement of rules, building codes and planning guidelines.
- ***Incremental Reforms are Preferred over Wholesale Changes to the System.*** Despite the general perception among end users that service delivery is systemically flawed, end-users prefer to be selective about the changes they would like to see introduced. This may reflect either an endorsement of gradual change—which is the approach adopted by many of the governments in the region—or alternatively respondents' belief that radical change cannot occur in their country in any case.
- ***The Free-Rider problem.*** Service problems are caused by irresponsible consumer behavior—including payment defaults, illegal connections, vandalism and lack of awareness. Too often, end-users viewed services as an entitlement rather than an accountability

relationship between the provider and end-user. Payment defaults were seen to be encouraged by weak enforcement measures against those gaining illegal access to services.

- ***Accountability issues.*** Mechanisms to hold providers accountable and systems for public information dissemination are still embryonic. In some cities (Amman and Aden, for instance) new efforts to reach out to citizens through 24-hour service hotlines and timely remedies are generally exceptions the absence of accountability mechanisms.

Source:

World Bank (2007), *Municipal management & local governance: a service delivery perspective. Giving voice to end-user perspectives on public service provision*, Washington DC: World Bank Sustainable Development Department.

5. MUNICIPAL CONTRACTS: ALIGNING CENTRAL AND LOCAL GOVERNMENTS WITH INCENTIVES TO MAKE WISE URBAN INVESTMENTS

Over the next twenty years, Africa's urban areas are forecast to accumulate an *extra* 290 million residents—in effect doubling Africa's urban population. That means Africa's municipal governments face the challenge not only of retroactively building urban infrastructure and services for existing residents, but also of providing for new residents. Most of that growth will be concentrated in cities of 500,000 inhabitants or less, where municipal governance capacities are often especially weak. So, what governance models are available to ensure efficient urban investments are made?

Municipal Contracts have been pioneered by the World Bank's teams dealing with urban projects in West and Central Africa. A Municipal Contract is a contractual agreement between municipalities and central government, which typically includes a three-pronged program: a Priority *Investment* Program (PIP), a Priority *Maintenance* Program (PEP), and a Municipal *Adjustment* Program (MAP). **In essence, they provide a framework of incentives in which urban investments will be made wisely and consistently—through the use of standardized needs assessments, clearly codified governance responsibilities, and independent public monitoring.** This model was developed in Tunisia, which itself had seen the model at work in Europe. The World Bank has since sought to incorporate the Municipal Contracting model in most of the projects it funds in West and Central Africa, and by 2009, Municipal Contracts had been signed in around 170 municipalities in Guinea, Niger, Mali, Senegal, Benin, Rwanda, Burundi, Cote d'Ivoire, Ghana and elsewhere. Such contracts have accounted for around $800 million of spending, and have been formed with support from the World Bank, AFD, the EU, and several other agencies. Each project has sought to learn lessons from prior Municipal Contracts, and **the model is now mature enough to be used as a 'global product' rather than simply a 'good practice' story.**

A Municipal Contract is signed by central and local governments, and **links the continuing disbursement of funds in a particular city to the fulfillment of governance obligations**. These obligations are relatively simple reforms, such as the simplification of local taxation regimes, the decentralization of authority, and the building of local capacity—all of which can have profound impacts on the effectiveness by which investments are actually used. Those obligations are measured by a series of indicators, monitored by a third party—often a local organization, such as the Municipal Development Agency in Senegal. The power of this simple mechanism has been demonstrated in many cases. For example, in Nouadhibou, Mauritania, once the local media began publicizing the story that the municipal government was falling short

of its obligations and therefore endangering continued funding of physical investments, there was a public outcry and the local government was jolted back into shape. And in Guinea, the contracting approach seems even to be providing continuity through a period of central government instability. In Senegal, municipalities were able to reduce the payroll share of their current revenues from 37 percent in 2001 to 28 percent in 2003; capital investment as a share of current revenues increase from 10 percent in 2001 to 17 percent in 2003; priorities among investments were made explicit for the first time; and 95 percent of municipal loans are being repaid.

Municipal Contracts are formed as follows. First, two audits are conducted. **An 'Urban Audit' gathers baseline information on existing services and infrastructure, patterns of urbanization, and pockets of poverty**: what are the gaps in physical infrastructure and services; how would it cost to bridge them; where are the most impoverished areas of the municipality; what are the priority needs; what are the constraints on economic activity; and what existing community representation exists? In short, what are the city's needs and priorities, and how should an investment program be formulated for that local context? The second audit—**a 'Financial and Organizational Audit'—assesses the financial health of municipal government, its management structure, and its capacity to receive investments.** This audit is used to identify a set of pragmatic adjustment measures the municipality is willing to take to improve its management and finances—through the mobilization of local resources and increased capacity (which can include steps as simple as increasing the number of staff members). Both audits are performed by use of a standardized list of questions and data tables; but much of the data itself is generated through participation of local stakeholders. In practice that the audits are typically performed by local consultants working with local government departments and private actors and stakeholders.

Using these two audits, a three-fold program is devised, to which the central and local government agree to abide for an initial four-year term. Its three components are:

(i) **Investment Program** (based on the Urban Audit). This component is essentially the identification of a priority infrastructure investment program, subject to a number of environmental and social assessments, and sized according to local capacities as identified in the 'Financial and Organizational Audit'.

(ii) **Maintenance Program** for municipal assets. This component codifies exactly what maintenance procedures will be undertaken, and likewise is monitored with respect to specific quantifiable indicators.

(iii) **Adjustment Program** (based on the Financial and Organizational Audit). This component includes very specific actions that the local government and central government are required to undertake, to improve their financial and organizational regimes. It is monitored against very specific quantified indicators, which are agreed upon during the audit.

The 'Municipal Contract' consists of these three programs combined—'Investment', 'Maintenance', and 'Adjustment'. Each of these three programs is divided into annual stages, with funding for next year's investment program contingent on satisfactory municipal reforms during this year's program. After this initial four-year term is completed, the program can subsequently be expanded, through repeating the audit and contracting process for a second or third generation of investments. **Thus even if the Programs begin with relatively modest reforms, they establish an institutional foundation which can be built more ambitiously over time, in successive auditing and contracting processes.**

The parties to the Contract are typically the Minister of Finance (for the central government), and the City Mayor (for the local government). For larger cities, the head of the metropolitan governing body is also included if one exists; but in any case each administrative entity in the metropolitan area will already be included. It is crucial to involve these main actors—at different scales of government—and have them all commit to the same menu of actions, and thus generate a coincidence of interests in furthering the same agenda. In other words, local, regional, and national investments and strategies should become harmonized in this framework, since all parties have agreed to the same Contract. **Clear rules of the game and precise contractual agreements are essential: everyone must know what their responsibilities will be, and the fulfillment of obligations must be monitored by a third party who reports its results publicly. Thus, if obligations are not met, and funds are withheld, everyone will know with whom the fault lies—thus providing a clear incentive to correct it.**

Finally, one of the key benefits of the Contracting approach is that it provides a clear platform for other donors to invest—even those who aren't typically involved in 'urban' work. Where the World Bank has fostered Municipal Contracts in Africa, other parties have in many cases provided core or parallel financing within the Municipal Contracting framework.

In the next generation of Municipal Contracts, the Bank hopes to strengthen the strategic vision of each city within the Urban Audit, to add an analysis of each city's spatial expansion, and to render more sophisticated the analysis of local economic activities and industries—all three of which can inform better strategic choices about Infrastructure across municipal boundaries.

Sources:

Farvacque-Vitkovic, Catherine (2009). Personal communication.

World Bank (2005), IEG evaluation of Senegal Urban Development & Decentralization Project (UUDP), Washington DC: World Bank Independent Evaluation Group.

World Bank Institute (2007), 'Decentralization and Municipal Development: the Municipal Contract Approach', Washington DC: World Bank.

World Bank (forthcoming), *Decentralization and Municipal Development: the Municipal Contract*, Washington DC: World Bank.

6. BAAN MANKONG URBAN UPGRADING PROJECT IN THAILAND

Thailand's cities in 2003 were facing substantial problems. There were 8.25 million people living in poor-quality housing in 300 cities. Two-thirds of those settlements had insecure tenure, of which 30 percent of households were squatters and 70 percent rented land but without secure long-term contracts. 70 to 80 percent of these 'slum' residents could not afford conventional housing, either through the market or through the conventional government housing programmes. Thailand's economic success was bringing little benefit to the poorest groups, and often actually worsened their housing conditions, by putting them at greater risk of eviction as land prices and demand for central city sites increased.

The Baan Mankong programme—which was launched by the Thai government in January 2003—shows how large-scale impacts can be achieved by supporting local community-driven processes. When added together, these achieve city and national scale. Its target was to improve housing, living and tenure security for 300,000 households in 2,000 poor communities in 200 cities within five years—i.e. half the urban poor in the entire country. This was to be achieved by providing infrastructure subsidies and housing loans from the government directly to poor communities, which plan and carry out improvements to their housing environment and to

basic services. **Crucially the low-income communities were to design and manage these upgrades themselves—through community organizations and local networks**; the government would simply provide the (relatively modest) funds.

The infrastructure subsidies are $715 per household when upgrading in situ, and $1,000 per household when re-blocking or relocating (going up to $1,285 per household for more expensive sites). The housing loans subsidies are provided as a lump-sum payment by the government's Community Organizations Development Institute (CODI). Lastly, there is a grant equal to 5 percent of the total infrastructure subsidy to help fund the management costs for each local organization or network; and a grant of around $50 to $150 per unit to support exchange visits, seminars, meetings, costs of coordination with city plans, on-the-job training activities, and salaries.

There are some key differences between this and conventional slum-upgrading approaches:

- **The key actors are urban poor community organizations and their networks**: they control the funding and the management. They (rather than contractors) also undertake most of the building, which makes funding go much further and encourages local innovations.
- **It is 'demand-driven by communities'**, as it supports communities who are ready to implement improvement projects and allows a great variety of responses, tailored to each community's needs, priorities and possibilities (for instance, communities choose how to use the infrastructure subsidy).
- **It does not specify physical outputs**, but provides flexible finance to allow community organizations and local partnerships to plan, implement and manage directly. These initiatives are coordinated with city-wide development through integrating community-constructed infrastructure into larger utility grids, and through some input from local academics and the municipalities.
- **Secure tenure is negotiated in each instance**, through a variety of means such as cooperative land purchase, long-term lease contracts, land swaps, or user rights. In all cases, the emphasis is on communal (rather than individual) tenure.
- **Collective efforts were strongly encouraged**, by favoring collective (not individual) land tenure, requiring collective planning and implementation of upgrading work, and issuing housing loans to the community cooperative rather than to individuals. Working together as a group is never easy, but it gives the poor, who usually have no power at all, the strength and confidence to do all kinds of things they could never hope to do individually. Doing things collectively also creates an important balancing and proactive mechanism between community members and various outside forces.
- **It promotes more than physical upgrading**. As communities design and manage their own physical improvements, this helps stimulate deeper but less tangible changes in social structures, managerial systems and confidence among poor communities. It also changes their relationships with local government and other key actors. ***This aspect distinguishes Baan Mankong most markedly from many other slum upgrading projects, including the Kampung Improvement Project in Indonesia and other lauded examples which concentrate on tenure, physical upgrading and infrastructure alone.*** In the words of CODI's Director, Somsook Boonyabancha, "if a whole group of people starts believing in their own power, energy and ability – this is upgrading."

The five-year target was tremendously ambitious, and though it was not fully reached, excellent progress has been made. By the end of the first five years of the programme, 53,976 households

had been reached, in 1,010 communities in 226 cities, through 512 projects. Of these projects, 64 percent had involved on-site upgrading, reblocking or reconstruction, 14 percent involved relocation within 5 kilometres, and 22 percent involved relocation beyond 5 kilometres. Tenure security involved cooperative land ownership for 44 percent of projects, long-term leases to community cooperatives in 39 percent of projects, short-term (less than 5 years) leases to community cooperatives in 8 percent of projects, and simply the permission to use land in 9 percent of projects.

A key factor in the success of scaling-up was the prudent choice of **pilot projects**. They were organized in as many cities as possible, to get things going, to generate excitement, and to demonstrate that community-driven upgrading can work. When an upgrading process is launched or a project inaugurated, people form neighboring cities are invited to see what is happening and what is possible, turning each city's milestone into a mass learning opportunity. Crucially these pilot projects are not the most difficult sites, which often become bogged down in complex tenure problems and do not generate momentum in the rest of the city. Those can be tackled once momentum has been built. And, most importantly of all, they are being undertaken not by outsiders but by people who are also poor. **Other poor communities can really believe that if they can do it, so can we.**

Sources:

Boonyabancha, Somsook (2005), 'Baan Mankong: going to scale with 'slum' and squatter upgrading in Thailand, *Environment & Urbanization*, 17 (1), April 2005.

CODI (2008), *CODI Update 5*, March 2008. http://www.codi.or.th/index.php?option=com_content&task=view&id=1861&Itemid=52

7. MOVING FROM SOCIAL SAFEGUARDS TO PROACTIVE SOCIAL POLICIES FOR THE URBAN POOR IN TAIZ, YEMEN

The Taiz Municipal Development and Flood Protection Project demonstrates how the challenges of urban growth—including the growth of slums and decreases in public health—can be mollified creating more inclusive, cohesive and accountable institutions and societies. **Based on the project's success, the government decided to scale up this single operation—firstly to a citywide strategy, and then to a national strategy that is focused on urban poverty.**

The Taiz Municipal Development and Flood Project was initially designed to alleviate the negative effects of seasonal flooding in the city (which causes damage to homes and businesses and generates significant financial losses). It also aimed to build the local government's capacity for development planning thereby advancing Yemen's process of decentralization. By the end of the project, new flood channels were benefiting an estimated 10,000 households and 1,000 businesses in the city by improving safety and access within the city and greatly reducing the loss of lives and property due to flash floods. However, **the project also unexpectedly succeeded in making significant progress in the social realm.** Indeed, while the Project Appraisal Document did not even contain the word "social", the project integrated social components so successfully that it ultimately transformed the city's approach to social policy.

These social benefits stemmed from a social assessment conducted during the preparation stage, which highlighted that 245 families (around 1,500 people) living in informal settlements would be displaced by the project's construction activities. They were members of the Al-Akhdam caste, which is among the most marginalized and poorest segments of Yemeni

society. Members of the Al-Akhdam community were very marginalized, distrustful of the government and outside development organizations, and not accustomed to having direct personal contacts with political leaders in the city. For its part, the local government was skeptical about working directly with members of the community and doubted that the formation of a productive partnership would even be possible.

The success of the resettlement process came about as a result of close collaboration between a wide range of stakeholders including Al-Takaful (a local non-governmental organization that was responsible for facilitating the community's transition from the flood affected area to the resettlement community), the local council and the private sector. **In order to build Al-Takaful's capacity to work collaboratively, the project sponsored a study tour to India for Al-Takaful's staff, plus Al-Akhdam community members and local government officials.** Members of the local government initially exhibited resistance to taking community members on the trip, but the experience proved to be a transformative experience for government officials and community members alike. The inclusion of community members on the trip increased trust by demonstrating to the community that they could be participants in the resettlement process and active citizens in the town in which they live. Moreover, the inclusion of members of this very marginalized group in the same study tour as high-status government officials demonstrated new possibilities for both sides. Finally, in the course of meetings with SPARC, an Indian NGO with extensive experience implementing community development and providing affordable housing for slum dwellers, participants were able go through shared experiences which helped them generate a number of ideas and strategies to more effectively facilitate the resettlement process.

The initial product of this collaboration was a resettlement village with infrastructure and other amenities, including secure land tenure, access to municipal services, health and education infrastructure, livelihoods training, and safe recreation areas. These initiatives have helped **improve the resettled population's livelihoods markedly since they were resettled**. But the project also used the resettlement process as a vehicle to **empower a previously marginalized population to participate in the development process.** For example, Al-Takaful recruited 'catalysts' and other volunteers from within the community to help organize the community and enhance their capacity for collective mobilization. The community has continued to interact with local government officials even after the resettlement process concluded, and the government invited community members to the launch of the Country Social analysis, where they had the opportunity to raise concerns about how the plan addressed the needs of marginalized populations. Furthermore, the project also ensured that land titles were jointly issued in the name of both spouses. Given that women are not typically included on land titles in Yemen, the joint titling represented a major step forward on gender issues within the community. In fact, it was the first time that joint titling for men and women had occurred in Yemen.

By the time that the President of Yemen attended the ceremony celebrating the inauguration of the resettlement village, the project's poverty focused approach had generated significant interest among government officials and the public in general. The resettlement village had **come to embody the local council's vision for the future of the city and its aspirations in terms of dealing with poverty issue, informality and excluded groups.** The city of Taiz then partnered with the project to conduct two important activities to promote pro-poor development within the city. **First, the local council adopted poverty alleviation as its main priority and requested assistance in preparing an Urban Poverty Alleviation Strategy (UPAS).** This included a detailed diagnostic of poverty and current poverty indicators, a detailed analysis of how the actions planned would impact poverty and recommendations on how to enhance their impact, specific poverty alleviation programs, and a detailed monitoring and evaluation plan. The process of formulating the UPAS was conducted using a participatory approach to ensure that

they were consistent with local citizens' development needs and priorities. **Second, the new city Master Plan focused explicitly on identifying and upgrading under-serviced areas where large concentrations of poor people lived.** In partnership with Taiz University the local council conducted a household survey of people living in squatter/informal settlements about their living conditions and priorities. The results of the survey provided the local council with an unprecedented snapshot of poverty dynamics within the city, which subsequently informed the council's strategy on this issue. Researchers also conducted a second household survey throughout Taiz City which was used to inform the development of a comprehensive upgrading strategy and action plan. Based on the close relationship that stakeholders developed throughout this process, the local council subsequently allocated funding to a newly formed think tank at the University which focuses on issues related to urban poverty.

What lessons can be learned from this project? **First, close collaboration between urban and social specialists is critical.** In addition to providing advice on resettlement, social specialists also ensured that other social themes such as community participation and developing linkages between communities and local government were effectively addressed. This greatly strengthened the project's overall effectiveness. **Second, small successes can have a big impact on policy.** Though the resettlement process only impacted 245 families, it became a symbol of what the city could aspire to accomplish through urban upgrading activities. As a result, the local government integrated a poverty focus, which was informed by household surveys on poverty issues, into its Master Plan. **Third, an important part of promoting inclusion is to bridge gaps between different stakeholder groups.** The project took proactive measures to ensure effective coordination between stakeholder groups and to address distrust between the resettled community and local government. From the joint study tour to the community empowerment and advocacy activities conducted by Al-Takaful, the project generated important linkages which ultimately allowed the project to succeed. Arguably, these relationships have provided a template for broader social transformations by showing it is possible for the most marginalized and excluded people to be treated as citizens. **Fourth, resettlement provides an opportunity to do good.** Instead of simply 'doing no harm' the project adopted a 'doing good' approach to the issue of resettlement (see the Box Profile in this document on *Social Analysis in the Urban Sector* for more details). As a result, the project-affected community was much better off after the project was completed than they were initially. Indeed, since they were resettled, the community has been empowered to participate in guiding the development process and experienced improvements in their livelihoods.

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8. CITY SYSTEMS IN CHINA

From 1980 onwards, China sought to "*control* the size of large cites; develop medium cities *reasonably*; and develop small cities *actively*". In 1989 this guideline was modified to "*strictly control* the size of large cities, and develop medium and small cities *actively*." By 2001, China was recognising more explicitly the way that differently sized cities work together, and encouraged the *synergetic development* of large, medium, and small cities and towns in its 10th Five-Year Plan (2001-2005). Since 2006, as stated by China's current 11th Five-Year Plan (2006-2010), 'city clusters' will be the "main form of urbanization" to be encouraged in China. These clusters entail the grouping of large cities with medium and small cities, each forming a 'city system'.

China's encouragement of these city systems is motivated by the development paths of its two economic powerhouse regions: the Pearl River Delta and Yangtze River Delta. The Yangtze River Delta encompasses Shanghai, Suzhou, Hangzhou, Nanjing and other cities, has only 6.7 percent of China's total population, but accounts for fully 15.7 percent of China's GDP. The Pearl River Delta encompasses Guangzhou, Shenzhen, Dongguan, Foshan, and other cities, has only 2.2 percent of China's total population, but accounts for fully 10.3 percent of China's GDP (even before accounting for Hong Kong & Macau). Much of this success is built on the same types of scale economies, localization economies, and urbanization economies reviewed by the opening chapter to this strategy, and by the WDR 2009. In the words of the CEO of one of the Pearl River Delta's largest electronics manufacturers, *"The materials and components that we use in our 49 production lines today arrive daily from suppliers in the zone by a route that generally takes not more than one hour. In practice, altogether we are a single vast factory scattered across the territory. The existence in a relatively small area of everything we need to make the whole range of audio products is the region's strong point. In other places the cost of labour may actually be lower, but around their factory there is nothing else."*

China is now building the institutions and infrastructure by which it hopes to grow several other city clusters. For example, in the Hunan Province, the cities of Changsha, Zhuzhou and Xiangtan are cooperating to build expressways and railways between them, and out towards their hinterland of smaller cities and towns. A regional cooperation plan between the three cities specifies that market prices will allocate land for different uses, and promotes land intensification in central city areas.

Sources:

GDP statistics are for 2006 (most recent available year at publication), and are calculated from *China Statistical Yearbook 2007, Guangdong Statistical Yearbook 2007, Jiangsu Statistical Yearbook 2007, Shanghai Statistical Yearbook 2007, Zhejiang Statistical Yearbook 2007*. All published by China Statistical Press. Population figures do not account for unregistered migrants, and thus may be significantly understated.

Government of China (2006), 11th Five-Year Plan. Chapter 21, section 2.

Gutierrez & Portefaix (2006). 'Made in Hong Kong no more: long life! Made in China', UrbanChina magazine #07, 15th March 2006, p. 120.

World Bank (2008), *World Development Report 2009: Reshaping Economic Geography*, Washington DC: World Bank, p. 222.

Yang, Chen (2008), 'China: a case study of 1D-2D-3D areas', Background Note for WDR 2009.

9. BROWNFIELD REDEVELOPMENT AND URBAN REGENERATION IN CENTRAL AND EASTERN EUROPE

Brownfield sites are those that are affected by former uses of the site and surrounding land, are derelict and underused, and may have real or perceived contamination problems. Such sites are relatively widespread in Central and Eastern Europe, where industrial land accounts for as much as 13 percent of the built-up area in Prague, 15 percent in Warsaw, 27 percent in Sofia, 27 percent in Ljubljana, and 28 percent in Krakow. **Such sites are often also close to land in high commercial demand, have potentially high economic and fiscal values, and can reduce demand for new 'green field' development. Thus the objective of brownfield redevelopment is to bring such sites back to beneficial use.** This will usually involve **(i) remediation**—i.e. environmental assessment and technological response, and **(ii) redevelopment**—i.e. visioning and realizing market opportunities with both public and private benefits. These processes will

typically involve a plethora of disciplines, including property owners, lawyers, environmental consultants, real estate brokers and professionals, economic development specialists, insurance representatives, lenders, law makers and regulators.

These are not easy tasks. Ownership may be unclear, there may not be any immediate development interest, remediation work on waste removal and decontamination may be complicated, and investments have to be matched realistically with future demand. Hence brownfields can be classified into three major types:

- **'A' sites are economically attractive enough for remediation efforts to be undertaken through a sole private effort** (such as the Semanatoarea Plant in Bucharest, which is becoming a business and retail park, with conference center and 1,200 residential apartments);
- **'B' sites will need public-private partnerships because of uncertain future profitability owing to unknown contamination, ownership, or real estate markets** (such as the Skoda Plzen rehabilitation of a 180 hectare site, pursued jointly by the Czech government and private investors);
- **'C' sites are hardcore cases that can be redeveloped only through a concerted public effort** (such as the Emscher Park in Germany's Ruhr Valley, where $1.5 billion has been invested to redevelop the abandoned steel works and coal mining operations with housing, landscape parks, industrial museums, and 131 other projects).

The World Bank is currently formulating an AAA work program during the fiscal year 2009-2010 to build a foundation for assistance with each type of brownfield site, through knowledge sharing, technical assistance, and financing of public investments. It aims also to build a toolkit for brownfield redevelopment, using case studies and good practices from around the world.

Source:

Kessides, Christine, Marcel Ionescu-Heroiu & Wolfhart Pohl (2008), 'Brownfield redevelopment and urban regeneration with a focus on cities in East and Central Europe: a proposed work program', presented at *Seminar on Re-engineering the City: approaches to urban regeneration in the post-industrial city*, 8th October 2008, Washington DC: World Bank.

10. LOCAL ECONOMIC DEVELOPMENT IN ADEN, YEMEN

One of the economic challenges facing Yemen is to reduce its dependence on rapidly-depleting oil reserves and turn to promising non-oil sectors by attracting private investment. The World Bank supported Yemen's Port Cities Development Program (PCDP) to help three of Yemen's cities—Aden, Hodeidah, and Mukalla—position themselves to serve as economic growth poles. The PCDP is taking the form of a three-phase Adaptable Program Loan (APL) of $96 million from the World Bank to develop Yemen's coastal cities over a period of 12 years. This Program is being devised and implemented in a very challenging economic environment, which includes high unemployment, low foreign investment, and high poverty rates.

The PCDP began with small-scale infrastructure investments, such as improving facilities at a local fish market and infrastructure services for small manufacturing operations at an industrial estate. In the fish market on Aden's seafront, buildings were renovated and roofed, a new auction area was installed, the market area was expanded, and new drainage and sanitation

services were installed. There has been a profound transformation in the area, with such pride in the new facilities that they are cleaned two times a day; the market is much more attractive to Aden's residents, and has become a destination in itself, as part of Aden's resurgent shoreline. As an indicator of success, there are now 120 fish sellers (compared to 40 before the project). A Fishermen's Association now manages the market and leases out stalls to small-scale fishermen; and the local government earns $25,000 annually from a fee paid by this Association.

In coordination with the PCDP, Aden has meanwhile also formulated a City Development Strategy. **The Strategy aims to achieve a sustained rate of economic growth by facilitating the activities of its private sector, attracting regional and international investment, and increasing the share of regional and global air and sea shipping activity.** It also aims to increase its employment rate (with a particular focus on women and on marginalized socioeconomic groups), and to increase its worker productivity and average wage. Finally it aims to increase Aden's contribution to the national economy, specifically by making Aden Yemen's economic capital and primary growth pole.

The Strategy has made a number of achievements. It provides analytical foundations for the city's economic competitiveness, and has **introduced participatory planning approaches to urban planning**—including workshops and bilateral consultations with key stakeholders. This approach is notable in a context where all Yemen's prior Master Plan had been formulated in the capital city Sana'a and handed down to cities. The CDS proposed policies to develop the Port, Airport and Free Zone (the 'Core'); **to multiply economic value from the Core to the city economy through supply chain linkages**; to grow the scope and scale of the city economy outside the Core; **to create an enabling business environment for new and existing investment** (by streamlining regulatory procedures, and providing efficient private sector support institutions); to encourage micro and small enterprises and women in the economy; to market Aden to national, regional, and international investors; **to develop a competitive labor pool and responsive skills development**; and to create **liveable and well-serviced urban environments**.

At time of project evaluation, some challenges were being presented by project implementation—in particular the unclear role and responsibilities of the Local Economic Development department. But results have generally been promising, and have inspired local businessmen to contribute funds themselves, including over $350,000 to build a training center and initiate training programs.

Source:

GHK (2005), 'Final Evaluation Report: Qualitative Analysis of Outputs and Results. Aden Medium to Long-term City Development Strategy for Local Economic Development.'

Karam, Stephen (2004), 'Yemen Port Cities Development Program & Aden City Development Strategy: overview of Sira Bay & Fish Market', Washington DC: World Bank.

11. STREET ADDRESSING

Street addressing is a relatively simple intervention that can make a substantial difference for civic identity, for the delivery of urban services, for tax collection, and for economic development.

As urban populations rise, many informal settlements are created without street names and numbered buildings. The absence of street addresses renders it difficult: (a) for residents to locate

each others' homes unless they already know the location; (b) for government to institute an effective tax collection system if it cannot catalog the location of homes and businesses; (c) for urban services such as ambulances, fire trucks, or taxis to quickly reach their destinations; (d) for utility concessionaires such as water companies and electrical companies to enforce collection for user-pay services; (e) for businesses to advertise their own locations and to know the locations of their customers.

A sample of street addressing operations in African cities between 1989 and 2003 showed the average cost to be US$ 0.6 per capita and US$ 5.7 per addressed doorway. What steps are required to implement street addressing?

1) **Codification** establishes principles for the identification of streets and the numbering of buildings. Should streets be numbered or named? It is recommended to number all streets, and they can be given names over time beginning with the most important streets.
2) **Numbering Streets.** To make it easier to establish local points of reference, the city can be divided into address zones, each of which can be given an identifying number or letter. Street addresses will start with this identifier followed by consecutive numbering. Thus "Street 2.34" or "Street B.34" or "Medina Street 34" would be three ways of numbering the 34th street in Zone 2, Zone B, or the Medina District.
3) **Mapping.** This task consists of establishing an address map and its accompanying street index. The address map shows the boundaries of address zones, the names or codes for streets, the starting point ("point zero") and end points of streets, a coordinates grid, and major facilities. Commercial software does exist for computerizing a relational database, such as the 'Urbadresse' package.
4) **Numbering Doorways**, the longest phase in establishing the address system, is performed while road signs are being installed. Each street is visited, and a number is assigned to all doors and entrances. It is best to use a metric system numbering system, where doorways are assigned a number according to their distance from point zero. Odd numbers are located on the left side of the street, even on the right, rising as they move away from zero. House numbering will involve a meeting between the occupant and the numbering team (working under an official municipal mandate), during which information can be gathered that will serve as the basis for the directory and a possible database for the city. There may be some political difficulties with this process in squatter neighborhoods, since the assigning of numbers and addresses can sometimes be taken as implicit recognition of residency rights.
5) A **Computerized Address Directory** is compiled on the basis of information gathered during the doorway numbering exercise and will serve as reference for government agencies and utility concessionaires.

To keep costs low, it can be recommended that: (i) street signs be placed at only one corner of an intersection, or at every second intersection, if numbering is continuous; (ii) durable materials be used for signs for named streets (materials for numbering streets can be of lower quality); and (iii) sponsors for the operation be identified—including the utility concessionaires who benefit from addressing, but also other commercial providers of goods and services.

These implementation tasks are generally undertaken by municipal administrations, which may set up a special unit to manage the addressing operation. Subsequently, that same unit may be mainstreamed into conventional roads & works departments, but there must be clear responsibilities about whom is to keep addresses and the directory continuously updated. Meanwhile, a successful implementation also depends on sensitizing the local population through radio, television, and the press; that message will probably be best-received if it emphasizes how

useful the system will be for delivery of public services (ambulances, fire trucks) rather than calling attention to the potential for easier tax collection.
A review of practices in 13 African countries, and a comprehensive street addressing manual, is contained in the World Bank publication *Street Addressing and the Management of Cities*.

Sources:

Farvacque-Vitkovic, Catherine, Lucien Godin, Hugues Leroux, Florence Verdet, and Roberto Chavez (2005), *Street Addressing and the Management of Cities*, Washington DC: World Bank.

MIT Urban Upgrading resources (1999-2001), 'Urban Street Addressing', summarized from Farvacque-Vitkovic & Godin (1998) *The Future of African Cities*, World Bank. http://web.mit.edu/urbanupgrading/upgrading/issues-tools/tools/street-addressing.html

12. Disaster Risk Reduction in Action: The Cases of Istanbul and Sana'a

Turkey has begun a project to mitigate earthquake risks in Istanbul, with a US$400 million loan from the World Bank. Specifically the project improves the city's preparedness by enhancing its institutional and technical capacity for disaster management and emergency response, strengthening critical public facilities for earthquake resistance, and supporting measures for better enforcement of building codes and land use plans.
The need for such a project is demonstrated by the impact of past earthquakes in Turkey. In the 1999 Marmara earthquakes, the death toll reached over 17,000 with a direct economic impact estimated at about US$5 billion, or around 2.5 percent of GNP. According to recent assessments carried out by JICA (Japan International Cooperation Agency), the probability of a major earthquake affecting Istanbul in the next 30 years is 62% ± 12%. **If that earthquake is of the same magnitude as in 1999, it could result in up to 87,000 fatalities, 135,000 injuries and heavy damage to 350,000 public and private buildings, with an economic impact more than US$20 billion.**

The project in Istanbul has three main components:

- **Component A: Enhancing Emergency Preparedness.** This component focuses on improving emergency communications systems, establishing an emergency management information system, upgrading emergency response capacity, and increasing public awareness and training.
- **Component B: Seismic Risk Mitigation for Public Facilities.** This component focuses on retrofitting/reconstruction of priority public facilities such as hospitals, schools, administrative buildings and infrastructure; performing risk assessments for vital infrastructure, and risk assessments for cultural heritage buildings.
- **Component C: Enforcement of Building Codes.** This component supports *public awareness* of the importance of compliance with building codes and land use plans, *better enforcement* of building codes and land use plans, the *retrofitting or demolishing of unsafe buildings, voluntary certification* of engineering professionals in accordance with international standards, *streamlining the issuance of building permits*, and introducing *transparency measures* in issuance of building and settlement permits.

Meanwhile, the municipality of Sana'a in Yemen, with the support of the Global Facility for Disaster Risk and Reduction (GFDRR), has embarked on preparing a risk assessment as the basis for a larger Disaster Risk Management (DRM) strategy and implementation

action plan. These initiatives take place as part of the city's objective of mainstreaming DRM within the CDS process and the subsequent planned revision of the city's land use/master plan. Sana'a has already endured major losses of life, property and business because of flash floods and landslides, exacerbated by the rapid pace of informal/squatter settlement in risk-prone areas. Its cultural heritage assets—including the old historic center, a UNESCO world heritage site—are also at risk.

The GFDRR funding of $230,000 in Sana'a, and $708,000 nationally, supports:

- the preparation of feasibility and design studies for the overall **municipal flood protection system and selected flood protection works** in key priority areas, as well as a **Resettlement Policy Framework** to govern the resettlement and fair compensation of affected and at-risk population living in risk-prone areas (as defined by the DRM Plan and CDS);
- the development of an institutional **national strategy for mainstreaming DRM** within the municipal institutional structure (using Sana'a as a pilot) and **coordinating local authorities' interventions in risk reduction and mitigation** (e.g. land use planning, land management, urban upgrading, etc) and post-disaster intervention.

The project is sponsored by the Ministry of Planning and International Cooperation and under the technical supervision of the Ministry of Public Works and Highways, and is carried-out in close consultation with the EEU (Environmental Emergencies Unit), NDMU (National Disaster Management Unit), and the Sana'a CDS Implementation Unit.

Sources:

GFDRR (2009), 'Note on Seismic Risk Mitigation Project, P078359', mimeo.
GFDRR (2009), 'Note on Disaster Risk Reduction Institutional Mainstreaming Strategy and Priority Intervention Areas in Sana'a', mimeo.

13. AMMAN SOLID WASTE MANAGEMENT PROJECT – ATTRACTS CARBON FINANCING

With a flow of 2,400 tons of waste per day, Greater Amman Municipality (GAM) accounts for approximately 50 percent of Jordan's total municipal solid waste. GAM's solid waste management is remarkable in several respects. First, GAM collects MSW on a daily basis from almost 100 percent of its residents and disposes of it in a semi-controlled landfill located 25 km from the city. Second, **through automatic charges levied on electricity bills, and the inclusion of commercial solid waste fees as part of business licensing, it has one of the best solid waste cost recovery rates in the Middle East and North Africa (MENA).**

However, there are serious inefficiencies in GAM's solid waste management, and the costs of providing services are quite high. The municipality has been working to increase revenues related to SWM, but it needs to improve its efficiency in terms of collection, transfer, and disposal, including generating revenues from recoverable materials and landfill gas (LFG) recovery. In order to address these issues, GAM requested the financial and technical support of the Bank. The Amman Solid Waste Management Project was approved in 2008 for the amount of US $40.5 million, as a subnational loan to GAM with a sovereign guarantee.

The project systematically addresses municipal solid waste management issues and initiates steps towards making the system more integrated and efficient, while mitigating negative environmental effects at both the local and global level. Specifically, the project will: (i) environmentally upgrade and expand the existing municipal solid waste landfill **to meet Amman**

City's disposal needs *and* generate green electricity while mitigating Green House Gases; (ii) **improve cost effectiveness** of the existing municipal solid waste collection and transport systems and **improve overall cost recovery**. The project also finances the construction of two new transfer stations; and an expansion in capacity of the existing disposal facilities. Technical assistance and institutional support will be provided to the Greater Amman Municipality, focusing on performance and evaluation of solid waste services. In addition, the project includes engineering services to enhance the environmental and operational performance of existing disposal facilities.

Attached to this lending operation, the World Bank has entered into an agreement with GAM for the development and implementation of a Clean Development Project operation, and to purchase part of the Certified Emission Reductions (CERs) resulting from this project. These amount to 0.9 to 0.95 million tons of CO2 equivalent from 2009 to 2014, **creating revenues estimated at US$15 million by 2014. The project will also generate green electricity (about 160,000 MWh by 2014), with revenues estimated at US$25 million to 2019.** The project will thus generate net revenues of US$16.9 million at present values, following an incremental investment of US$23.5 million.

Source:

Friaa, Jaafar (2008), 'Brief on Amman Solid Waste Management Project & the attached Carbon Finance Operation', mimeo.

World Bank (2008), 'Amman Solid Waste Management Project', Project Appraisal Document, PID104960.

14. ECO^2 CITIES: ECOLOGICAL CITIES AS ECONOMIC CITIES

Eco^2 Cities is a new World Bank urban development program, which aims to help cities in client countries achieve greater ecological and economic sustainability. As the name implies, an Eco^2 City builds on the synergy and interdependence of ecological and economic sustainability. **Innovative cities in both the developed and the developing world have shown it is possible to generate the same value from a smaller and renewable resource base, while simultaneously decreasing harmful pollution and unnecessary waste.** By doing so, they have improved the quality of life of their citizens, enhanced their economic competitiveness and resilience, strengthened their fiscal capacity, and created an enduring 'culture' of sustainability. At the same time, many of their interventions have also provided significant benefits to the poor. Urban sustainability of this kind is a powerful and enduring investment that will pay compounding dividends. In a fast-paced and uncertain global economy, cities that adopt such an integrated approach are more likely to survive shocks, attract businesses, manage costs and prosper.

The Eco^2 Cities program carries a number of benefits. First, it provides cities with a comprehensive analytical and operational framework for cities to adopt the Eco^2 approach as part of city planning, development and management. Second, it facilitates cities in developing countries to access the financial resources needed for strategic urban infrastructure investments. Third, it embodies the kind of bottom-up approach which has been manifested in many of the most innovative best-practice cities around the world, which have managed to pursue ecological and economic progress together. For example:

- Yokohama, Japan's second largest city, has demonstrated how an integrated approach to waste management, combined with stakeholder engagement, could reduce solid waste by 39

percent during a period when population actually grew by 170,000. This significant waste reduction allowed Yokohama to save US$1.1 billion required for the renewal of two incinerators, as well as saving US$6 million in annual operation and maintenance costs.

- Vancouver, Canada has demonstrated how a set of basic land use planning principles, combined with independent thinking at the local level, can help to create a highly livable region and to combat the market forces that lead to urban sprawl. As a consequence, the metropolitan area is much more compact than other metropolitan city of same population. The downtown core is home to a large population including families, has no freeway access, and is consistently ranked number one or two amongst cites worldwide in terms of livability.

The Eco^2 analytical and operational framework is rooted in four key principles:

1) **A City-Based Approach**, which enables local governments to lead a development process that takes into account their specific circumstances, including their local ecology.
2) **An expanded platform for collaborative design and decision-making, that accomplishes sustained synergy by coordinating and aligning the actions of key stakeholders.** A city can lead a collaborative process on at least three tiers. At the first tier, projects may be completely within the realm of control of the **city administration** itself, and will entail a city getting its own house in order—an energy efficiency upgrade for all municipally-owned buildings for example, or a ride-share program for employees, or peak load management. The second tier engages the city in its capacity as a **provider of services** (transit, water, waste management), and as an authority with planning, regulatory and decision making powers. At this level, greater collaboration is warranted with other stakeholders who can help to define and contribute to success outcomes. The third tier is where the city can influence **projects that directly impact the entire urban area**—like the development of new land, economic planning, and metropolitan management—and may necessarily involve senior governments, key private sector partners and civil society. The third tier requires that the city take the lead in providing an effective process for collaboration, with scheduled meetings and reporting. By creating a common vision and reaching consensus on best strategies, triple tier collaboration gets everyone rowing in the same direction.
3) **A one-system approach, which enables cities to realize the benefits of integration by planning, designing, and managing the whole urban system together.** This can mean enhancing the efficiency of resource 'flows' in an urban area through integrated infrastructure system design and management. For example, the looping and cascading of energy or water through a hierarchy of uses can satisfy many demands with the same unit of supply. The One System Approach also includes integrating urban 'form' with urban 'flows' by coordinating spatial development (land use, urban design, and density) with the planning of infrastructure systems. For instance, new development can be directed to those locations with a surplus of water, energy, and transit.
4) **An investment framework that values sustainability and resiliency by incorporating and accounting for life cycle cost-benefit analysis, the value of all capital assets (manufactured, natural, human, and social), and a broader scope of risk assessments in decision making.** Policies, plans, and projects tend to be assessed on their short term financial returns, or on an economic valuation based upon narrowly-structured cost benefit analysis, from the perspective of a single stakeholder or project objective. Decisions are dominated by immediate capital costs, despite the fact that often over 90 percent of lifecycle costs for typical infrastructure are expended during operational maintenance and rehabilitation. Few cities worldwide have a real knowledge of the impact of new development on their long-term fiscal condition. Lifecycle costs are often back-loaded,

which means that future generations will have a massive infrastructure deficit, as they face costs for repair and replacement of infrastructure without any prior capitalization. At the same time, ecological assets, the services they provide, and the economic and social consequences of their depletion and destruction are not accounted for in most government budgets. Since these assets are not measured, they are treated as zero value – and their services go unaccounted for. **A reformed framework for making policy and investment decisions would involve adopting a new range of indicators and benchmarks for assessing and rewarding performance of all stakeholders; longer time horizons; life-cycle cost-benefit analysis to understand the full implications of policies and investment options.** All four categories of capital assets (manufactured, natural, human, and social) and the services they provide must be appropriately valued or priced.

Cities are encouraged to operationalize these core elements into a series of concrete action items, called 'Stepping Stones,' that take into account of local conditions, and follow a logical sequence. Together these stepping stones enable a city to develop its own unique Eco^2 action plan, called an Eco^2 Pathway. In this context, an Eco^2 City is a city which formally accepts the four key principles, applies the Analytical and Operational Framework to its particular context, and by doing so develops and begins to implement its own Eco^2 Pathway.

The Eco^2 Program provides the foundation for long-term partnerships and a new business model for helping cities in developing countries achieve greater ecological and economic sustainability. The World Bank intends to collaborate with cities in developing countries, their national governments, the international community, global best practice cities, multilateral and bilateral development agencies, academia, private sectors and NGOs.

Source:

World Bank (2009), 'Eco^2 Cities: Ecological Cities as Economic Cities' brochure, Washington DC: World Bank.

For more information, see http://www.worldbank.org/eco2

15. MAINSTREAMING DISASTER RISK REDUCTION STRATEGIES AT THE CITY LEVEL

- Strengthen building codes and take measures for effective enforcement, including capacity building of city officials and other stakeholders such as builders, and enhanced awareness and information flow to the public.
- Improve land use planning and zoning to exclude the riskiest areas from formal development; strengthen enforcement to prevent informal development of such zones, so new housing can develop on less hazard-prone land.
- Make land and housing markets more transparent and provide detailed information in order to price disaster risk into land and housing values.
- Improve information flow on risks in cities, which will create scale for developing market based insurance mechanisms - ensure to insure
- Invest in risk mitigation where the payoffs are highest (a very small proportion of a city may account for a very large share of expected losses).

16. SUB-NATIONAL FINANCE PROGRAM (SNFP)

Portfolio commitments for the SNFP since FY07 amount to $641 million for a total of eight transactions. These include financing for: (i) the Istanbul Metro Project ($65 million); (ii) the Bogota Streets Project ($45 million); (iii) the Energy Development Corporation (EDC) commitment in the Philippines ($82 million); and (iv) the Panama Canal Project ($300 million). The broader project pipeline suggests strong business momentum and development impact potential.

Future Outlook. The current active pipeline amounts to $515 million in 13 transactions, with over half of the dollar commitment volume accounted for by SOE utility projects. Three of these thirteen transactions have been approved by the Board, and all but one are past the concept stage and are either under appraisal or appraised. The pipeline builds substantially on the breadth and depth of the portfolio: water utilities in Brazil, gas distribution in India, gas distribution, district heating and railway rolling stock in Russia, a port in Vietnam and street lighting in Dakar, Senegal.

Despite this progress, many obstacles remain. This is a difficult market segment, often subject to significant legal and regulatory obstacles, prohibitions of borrowing from foreign lenders even in local currency, client capacity constraints and slow client decision making processes, as well as shifting domestic market conditions. Current countries of focus include Russia, Colombia, India, Brazil, Peru, the Philippines and Morocco, each with varying degrees of openness to Sub-National entity and SOE utility borrowing on a non-sovereign basis. Experience to date suggests that while the pure municipal market in Middle Income Countries (MICs) is a sound market proposition that will continue to offer substantial development and financing opportunities, development of these opportunities is a long-term business and will take time. By contrast, the large SOE utility market segment represented typically by autonomous corporations with distinct balance sheets could move forward much faster. The need for financial innovation, development of local currency instruments and collaboration with local financial institutions has been addressed, most notably through development and use of various forms of risk-sharing and guarantee instruments with local financial institutions.

17. JOINT RAILWAY CONCESSION PROJECT, KENYA/UGANDA

The Kenya-Uganda Railway Concession Project **(**KRC) consists of a joint concession of the railway systems of Uganda and Kenya, for which an IDA Partial Risk Guarantee (PRG) for Kenya (US$ 45 million), and an IDA Partial Risk Guarantee (PRG) for Uganda (US$ 10 million), were provided in support of the concession. The railway concession is a critical component of a regional operation, the East Africa Trade and Transport Facilitation Project (EATTFP) which also included IDA credits of US$ 120.62 million to Kenya and US$ 26.4 million to Uganda. The Rift Valley Railways Consortium (RVRC) is the holding company which has set up a subsidiary company in each country (KRC and URC) to undertake the respective concessions. The joint concession is structured legally as two separate 25 year concessions, which will be supported for their entire terms by two separate IDA PRGs in support of the respective concession companies. The concession companies will be responsible for the rehabilitation and maintenance of all assets to specified standards and for the achievement of minimum investment levels and traffic growth targets stipulated in the concession agreements. IFC and KFW have committed financing to the company through A and C loans for RRVRC's investments.

The PRGs will backstop political and government-related risks and could only be triggered as a result of a termination due to a breach of the concession agreements by the Government of Kenya or the Government of Uganda. The availability of the two PRGs was considered critical by RVRC to its ability to catalyze long term debt and equity investments and played a crucial role throughout the concession process in maintaining investor's interest during the bidding process, enhancing the bid value, and bringing the concession to financial closure. The project was approved by the Bank's Board of Executive Directors in January 2006 and awarded "Africa Infrastructure Deal of the year" in 2007 by Euromoney. However, the effectiveness of the respective guarantees is still pending because of some project issues relating to the RVRC consortium which has not paid the necessary guarantee fees to IDA to make the PRGs effective. The project is currently being restructured with the assistance of IFC.

18. SELECTED PROFILES OF OUTPUT BASED AID APPROACHES FOR URBAN UPGRADING

Output-based aid (OBA) is a mechanism to improve delivery of basic infrastructure and social services to the poor. The concept was introduced in the World Bank Group in 2002 through the Private Sector Development Strategy and more formally in January 2003, when the Global Partnership on Output-Based Aid (GPOBA) was launched as a World Bank-administered pilot program to test the approach with a view to mainstreaming it within IDA and with other development partners.

Unlike traditional approaches, OBA links the payment of aid to the delivery of specific services or "outputs." These can include connection of poor households to electricity grids or water and sanitation systems, installation of solar heating systems, or delivery of basic healthcare services. Under an OBA scheme, service delivery is contracted out to a third party, usually a private firm, which receives a subsidy to complement or replace the user fees. The service provider is responsible for "pre-financing" the project until output delivery and the subsidy is performance-based, meaning that most of it is paid only after the services or outputs have been delivered and verified by an independent agent. This increases accountability by shifting performance risk to the provider.

The upgrading of slums using OBA has been recognized as an effective tool in response to the financial crisis under the World Bank's Infrastructure Recovery and Assets (INFRA) Platform. Such schemes can create jobs, encourage reform of inefficient public utilities, and at the same time improve access to basic services for the urban poor. OBA is already being used to improve access to basic services for the urban poor in countries such as India, Indonesia, Morocco, the Philippines, and Uganda, and the focus now is on scaling up pilot projects into national schemes.

The following are examples of OBA schemes that can be included in broader slum upgrading programs.

Philippines: Manila Water Supply

This project seeks to provide affordable piped potable water to poor households in the East Zone of Manila through the Tubig Para Sa Barangay ("TPSB") or Water for the Community program administered by the Manila Water Company (MWC). GPOBA has provided a grant of US$1.05 million for the scheme which is expected to benefit approximately 20,000 poor households or 120,000 people. The subsidized outputs in this project are households with an individual water service connection, after-the-meter piping and two faucets, and a water closet. The success of the Manila Water OBA pilot scheme has led to discussions with the National Economic and

Development Authority (NEDA) on scaling up through the creation of a national OBA water facility.

Morocco: Extending Water Services to the Poor in Urban Areas

Morocco is a middle-income country with good water infrastructure that provides access to safe drinking water and sanitation to the majority of the urban population. In 2005, Morocco made it a priority to extend service to poor peri-urban settlements, and encouraged operators and local governments to reduce connection fees for their inhabitants. These connection fees had been priced at a cost that represented a major obstacle for poor populations to connect to piped service. The government and the operators of water utilities in Casablanca, Meknès, and Tangiers consequently requested a grant from GPOBA to pilot the introduction of performance-based subsidies to encourage service expansion under an OBA approach. Launched in 2007, Morocco's urban OBA pilots aim to connect 11,300 households to piped water and sanitation service in poor peri-urban neighborhoods of these three cities. The pilots are funded through a US$7 million grant from GPOBA and are implemented by the incumbent service providers in each city (private and public). The Government of Morocco also plays an oversight and monitoring role.

To date 17,000 poor people have benefitted from the program. Initial results show that this approach is helping to refocus service provision on household demand, which has increased accountability, strengthened partnerships between local authorities and operators, and made monitoring of service delivery a priority. The Government of Morocco has expressed interest in replicating the OBA approach on a citywide or nationwide scale, adapting it as necessary. As part of GPOBA-supported supervision of the pilots, the World Bank is working with the government to plan a scale-up program that would address the needs of several large municipalities.

Uganda: Water Connections for the Poor in Kampala

This OBA scheme aims to provide water services to poor households previously not served in slum and peri-urban areas of Kampala, Uganda by providing a one-off connection subsidy to partially fund the cost of new domestic metered connections. The utility, the National Water and Sewerage Corporation (NWSC), expects to reach an estimated 408,000 people through the installation of over 19,000 yard taps and 1,000 public water points. The connections will be pre-financed on an output-basis by NWSC, which will receive payment only after the outputs have been independently verified. The project will also continue the recent piloting of pre-paid meters, and conduct an impact evaluation to determine the effectiveness of this approach compared to conventional metering. About 1,700 connections (yard taps and public stand-posts) have been made and independently verified so far, serving about 30,000 low-income urban dwellers. GPOBA is supporting the project through a US$2.5 million grant.

India: Improved Electricity Access for Slum Dwellers in Mumbai

The city of Mumbai has over 6 million slum dwellers, a large number of whom do not have access to legal electricity service. The utility serving the area – Reliance Energy – has a customer base of 5 million in Mumbai, Delhi and Orissa. It is working in cooperation with the US Agency for International Development (USAID) to increase the uptake of legal and safe electricity connections in slum areas of Mumbai.

In May 2009, GPOBA provided a US$1.65 million grant to subsidize part of the costs of electricity connection and wiring for inhabitants of the Shivajinagar slum in Mumbai. Up to 26,000 slum households or approximately 104,000 slum dwellers are expected to benefit from the scheme, either through new electricity connections or regularization of existing connections. The project aims to demonstrate how an OBA approach can make a significant difference to the level of access to safe and adequate electricity supply in the Indian slum context. Successful

demonstration will lead to substantial potential for scale-up in slum communities in Mumbai, across India, and in other large urban slum environments around the world.

Indonesia: Expansion of Water Services in Low-income Areas of Jakarta

The city of Jakarta has one of Asia's more efficient water utility systems, but network growth is too slow to make a significant impact on the low access rates among the poor. Low-income communities in Jakarta often consume contaminated ground water from shallow wells or pay exorbitant fees to informal water carriers. It has been estimated that the poorest, unconnected households spend 15 percent or more of their household income on water. GPOBA has provided a US$2.6 million grant for a project to test an output-based approach that would connect a selected low-income urban area of Jakarta. This project will bring water services to an estimated 11,630 poor households.