Advances in the Evaluation of Informal Settlement Upgrading in Brazil

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Abstract

This thesis focuses on the practice of evaluation of informal settlement upgrading projects in Brazil. The country experienced a wave of rapid urbanization over the last sixty years, with eighty-four percent of the population now living in cities. As cities lacked affordable housing options commensurate with their burgeoning populations, informal settlements proliferated. Over several decades, policy responses have evolved to promoting the upgrading of these settlements. A wide variety of strategies has been employed to address the material, social, and legal issues associated with informal settlements. The actors have been equally diverse, including federal and municipal government, NGOs, international agencies, and community-based organizations. After more than a generation of concerted trial and error in designing and implementing upgrading programs, how have monitoring and evaluation practices been put to use?

Grounded in an understanding of global urbanization trends and current debates around the practice of monitoring and evaluation, this study aims to: 1. Establish the importance of monitoring and evaluation as a critical element in improving the outcomes of upgrading and building an international body of knowledge around effective upgrading programs; 2. Assess the current practice of monitoring and evaluation of upgrading programs in Brazil; 3. Identify the challenges and barriers that currently impede the broad usage of such evaluation systems, and; 4. Identify the national trends that point to increased use of monitoring and evaluation in the future.

This research finds that systematic monitoring and evaluation of the development outcomes of upgrading programs rarely occurs. Academics and researchers conduct a wide range of evaluative studies, though these tend to be isolated and non-continuous. International donor agencies, and more recently the federal government, require project evaluations be conducted on particular projects, though these tend to remain at the level of project outputs. Many trends, however, indicate that the nascent practice of monitoring and evaluation is attracting increased interest from policy-makers, practitioners, scholars and stakeholders. It is concluded that M&E practice will continue to be refined and experience broader application in the coming years.
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Terminological Considerations

Relevant literature variously uses the terms: shantytowns, irregular settlements, self-help settlements, informal settlements, squatter settlements, slums, and precarious settlements. There is significant overlap between these terms and several are used almost interchangeably. While I do not intend to rehash the unresolved, decades-long debate on the appropriate terminology (see, for example, Gilbert and Gugler (1992) and Flood (2002)), I should clarify the terms commonly used in Brazil and identify those that will be used herein.

Universal and Technical Terms:

**Slum** – This is the term of choice in a good deal of popular literature and has been widely used by UN-Habitat, the World Bank, and others. UN-Habitat’s operational definition of a slum is a settlement that lacks one or more of the following: adequate access to safe water; adequate access to sanitation and other infrastructure; adequate structural quality of housing; adequate space, free of overcrowding, and; secure tenure or residential status (UN-Habitat, 2003:12). It is important to note, however, that different agencies and countries use their own operational definitions. The term dates back to 1820s London, as a metaphor of disease. It conjures up a slew of negative associations and stereotypes (crime, illness, immorality, etc) that emerged in the Victorian era and took decades of research and work to discredit. Many people have argued that it is a degrading slur, while others point to its potency in arousing much-needed public attention to this global crisis. I have generally chosen not to use this term herein, however I occasionally refer to slum conditions.

**Informal settlement** – This is the most widely used term in academia and the principal term used in this paper. It is often regarded as synonymous with slum (UN-Habitat, 2003:11). UN-Habitat defines it as “i) residential areas where a group of housing units has been constructed on land to which the occupants have no legal claim, or which they occupy illegally or ii) unplanned settlements and areas where housing is not in compliance with current planning and building regulations (unauthorized housing)” (WHO, n.d.:1). As such, informal settlements could be classified as slums due to the existence of tenure insecurity, and potentially other slum conditions.

**Precarious settlement** – This term is favored by Brazilian academics and practitioners. It focuses on the precariousness of conditions, not the informal formation process and/or legal standing.

**Núcleo habitacional** – Literally translates as a “housing nucleus”. This term is used by some Brazilian practitioners in reference to clusters of homes or neighborhoods with slum conditions.

**Subnormal agglomeration** – This is the technical term employed by the Brazilian census, that refers to groupings of 50 or more households in slum conditions. Census designations do not, however, always align with communities’ self-identification.
Colloquial Brazilian Terms:

Most colloquial Brazilian terms are descriptive of the physical conditions, formation process or location of the settlement. Certain terms are used more commonly in particular regions.

*Favela* – Refers to a form of informal settlement in which “there generally is no legal relationship between the occupier and the real owner, whether public or private” (UN-Habitat, 2011:43). The term has deep symbolic resonance in the Brazilian imagination. It is a label of proud identity for some residents and a common theme in modern urban cultural expression. But to others it is closely associated with drug running, violence and misery. Even after settlements have been upgraded and formalized, this label (and its cognitive associations) typically remains.

*Loteamento* – A particular form of informal settlement, developed by illegally subdividing land and selling or renting plots (which are typically unserviced).

*Morro* – Hillside settlement. This refers to the historical location of the first (and many current) informal settlements in Rio de Janeiro, and is often used in diametric opposition to O Asfalto, or the formal, asphalted city.

*Palafita* – stilted settlement, above water

*Invasão* – settlement on “invaded” properties

*Grota* – settlement in a deep valley or canyon

*Baixada* – settlement in lowlands or floodplain

*Ressaca* – settlement in backwaters (IBGE, 2011:1)

While the term informal settlement is the one predominantly used herein, it is not without reservation. Informal emphasizes the settlement process, denoting its lack of accordance with official development policy and thus illegality. However, it is important to recognize that there is “a complex continuum of legality and illegality” among many settlements (Roy, 2005:149). Roy clearly shows how the term informal is an insufficient descriptor, as a variety of distinctions can be made within the category (ibid). She goes on to provide examples of two different manifestations of informality: “squatter settlements formed through land invasion and self-help housing can exist alongside upscale informal subdivisions formed through legal ownership and market transaction but in violation of land use regulations” (ibid). She concludes that “both forms of housing are informal but embody very different concretizations of legitimacy; the divide here is not between formality and informality but rather a differentiation within informality” (ibid). The state wields a discretionary power to label or officially recognize a settlement as “informal”, and unsurprisingly tends to use this power unevenly against low-income settlements. For the purpose of simplicity, the term informal settlements as referenced herein, refers to low-income informality.
Informal settlement, like other categorical terms listed above, paints broad, homogenizing brush strokes. Such terms evoke negative connotations and diminish the appreciation of these places primarily as homes, neighborhoods, and communities with unique characteristics and colors. They suppress understandings of collective agency and “the production of locality” (Appadurai 1996:178), and instead cast a shadow of judgment, victimhood and negativity. Each of these terms “can disguise significant...distinctions among low-income settlements” (Beardsley and Werthmann, 2008). In fact, a great deal of diversity exists within and among informal settlement communities: the culture, ethnic origin, household structure and income level of the population, as well as the settlement’s location, formation process, legal status, tenure arrangement, systems for transferring ownership or occupancy rights, house/land values, degree of service provision, etcetera. All of these distinctive characteristics contribute to the lived experience of the community and are essential to understanding both how the settlement functions and how it may be improved over time.

With this in mind, I hesitantly employ these terms in recognition of the functional necessity to use some language to refer to materially similar settlements.
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Chapter 1: Introduction

We are experiencing the largest demographic shift in history as a wave of urbanization sweeps the globe. For the first time ever, more than half of the world’s population lives in cities, and the trend shows no near-term signs of stopping. In fact, over the coming 20 years essentially all of the world’s population growth will take place in cities of the developing world (UNFPA, 2013:1).

That means that cities will be facing enormous infrastructural, environmental, institutional, and social challenges as they accommodate rapidly increasing populations (KPMG, 2012:5; Santos, 1996:236). People have created new urban communities for millennia, with residents overcoming all kinds of obstacles in incredible feats of individual and group initiative, ingenuity, perseverance, and adaptability. But government can play an essential role in setting a direction for growth and providing a baseline of urban infrastructure and services, upon which a society may thrive.

The unprecedented scale and speed of population growth (Davis, 2006:2) has largely outpaced cities’ abilities to make institutional transitions and provide infrastructure and services ahead of settlement (UN-Habitat, 2003b:3). This means that un(der)serviced, self-built settlements have proliferated, commonly without adhering to city land use and building policies. Cities that reject informal settlement clearance or removal, are thus faced with the challenge of upgrading existing settlements (as opposed to tabula rasa planning and development) and responding to an array of physical, logistical, legal, and social difficulties that comes with this practice.

Given these massive growth challenges, urban development programs/initiatives will need to incorporate the best available knowledge and strategically targeted the use of limited resources. UN-Habitat, in its groundbreaking publication The Challenge of Slums (2003), has issued a clarion call for increased monitoring and evaluation of informal settlement upgrading efforts. “When we ask whether programs have made a difference – whether they have really met their aims – we find relatively little reliable information or evidence,” says the Center for Global Development (2012:1).

Bill Gates, co-chair of one of the most effective and efficiently run humanitarian foundations in the world affirms that, “Success depends on knowing what works” (2005:1). Cities will have to base their programs on their own local experiences of what has worked and what hasn’t, as well as lessons learned
from other cities. Canadian housing scholar Steve Pomeroy poses that, “without good data, ongoing research and a system of assessment, it is difficult to clearly identify which programs and policies have the greatest impact and payback for public investment” (Pomeroy, 2004:12).

In this thesis, I study the use of monitoring and evaluation (M&E) in Brazilian informal settlement upgrading programs, with a strong focus on the Brazilian southeast. How common is the use of monitoring and evaluation? In what ways are monitoring and evaluation being conducted? What trends point to increasing use? What barriers to implementation exist?

There is a spate of prescriptive M&E literature coming from various international development agencies, such as UN Habitat, World Bank, and Cities Alliance, which I review in this thesis. There are also broad accounts of how monitoring and evaluation are conducted in urban development for several countries and regions: Europe (Carmon and Sieh, 2005; Khakee, 2003; Lichfield and Prat, 1998; Voogd, 1997), the Middle East (Alexander 1998a), and North America (Seasons, 2003b), as noted in Oliveira and Pinho (2010:350), though none is very systematic. These studies shed light on the gaps between research and practice, help to distinguish what factors are behind these gaps, and highlight opportunities for improving the application of effective evaluations. Within the context of informal settlement upgrading, however, there appears to be no literature that dissects the use of monitoring and evaluation in any particular country or region.

**Why Brazil?**

I have chosen Brazil as the focus of this study because of its considerable scale and comparatively lengthy history of informal settlement upgrading. In concert with intense industrialization in the 1960s and 1970s, Brazil experienced its urbanization boom. Unfortunately, this period was marked by decreasing “real” minimum wages and a strong concentration of wealth among the elite. Informal settlements proliferated. While clearance was the initial response, “this policy proved ineffective over time” as residents opted to rebuild informally, and the sheer scale of informal settlements made it “no longer feasible” to remove and relocate the population (Abiko, 2007:2). Government-sponsored upgrading has since become the dominant public policy, with over three decades of trial and error under their belt.

In recent years, a great deal of institutional capacity and funding has been dedicated to upgrading, ushered in by a new era of political stability, progressive politics, and economic prosperity. Brazil has
successfully reached and surpassed the first of the Millennium Development Goals, by reducing extreme poverty by over 60% in a thirteen year period (Neri, 2009:232), and has made great progress on its housing and urban development agenda:

“Brazil improved living conditions of some 10.4 million people between 2000 and 2010. Slum incidence regressed from 31.5% to 26.4% [of the urban population] due to: economic and social policies that have improved the income of poor urban homes; a decreasing population growth rate and slowing rural-urban migration; development of low-income housing policies that subsidize building material costs, sites and services, and provide slum upgrading and land tenure regularization; new social housing and urban infrastructure projects; the creation of a Ministry of Cities; and the adoption of a constitutional amendment safeguarding citizens’ rights to housing” (UN-Habitat, 2010:40).

Brazil ranks fourth in the world for informal settlement improvements in absolute numbers of population benefited, and first within Latin America (2000-2010) (ibid). These statistics are somewhat deceiving, however, as they mask the fact that the absolute population living in slum conditions has in fact increased. The more optimistic framing is that the ratio of this population compared to the (still growing) urban population has decreased.

Latin America in general, and Brazil in particular, are also host to some of the more innovative legal and community-based approaches to upgrading. Brazil is “one of the leading countries in the process of regularization and legalization of informal settlement” (Wimpey, 2004:4). Along with other Latin American countries, Brazil has demonstrated that “growing economies coupled with decentralization and democratization processes have resulted in stronger local autonomy and participation in urban development projects, as well as a new emphasis to reflect citizen rights through city form.” (Navarro-Sertich, 2011:1) Other scholars agree and point to the potential of spreading the lessons learned: “Latin America represents a laboratory for slum upgrading that might provide a model for other parts of the world” (Beardsley and Werthmann, 2008:2).

**Why Monitoring and Evaluation?**

By studying the current dynamics of monitoring and evaluation practice in Brazil, researchers and practitioners may identify opportunities for improvement. Improved monitoring and evaluation practices could accelerate endemic knowledge production around what works. *What types of upgrading interventions have the most impact? Which are most (cost) effective? What criteria and indicators of*
(cost) effectiveness should we use? Answering these questions will help to further refine upgrading policies and programs within the country, and, very importantly, can help provide direction for countries experiencing newer waves of urbanization with even fewer public resources to respond.

South-South information sharing is gaining tremendous momentum, as emerging middle income countries have begun to share their lessons learned (see the India-Brazil-South Africa Working Group on Human Settlements (IBSA) and the World Bank Institute’s Knowledge Exchange program). As such, improved information generation and sharing could have an enormous impact, affecting the quality of life and opportunities available to hundreds of thousands of people around the world.

Research Questions

My interest in this research topic stems from my professional experiences in community development work. Having designed and implemented a number of projects, I am acutely aware of the benefits of monitoring and evaluating projects to learn and make improvements over time. Now, as an urban planner, I am drawn to work with informal settlements because they are a dominant and growing presence in our world’s cities, presenting dynamic challenges for city planners and policy-makers. In order to address the issues of informal settlements at their global scale, we will need to be very strategic and efficient in our actions. This calls for increased monitoring and evaluation in order to better understand and refine current upgrading efforts.

This research is concerned with answering the following questions:

How common is the use of monitoring and evaluation in informal settlement upgrading in Brazil?

How are monitoring and evaluation being conducted?

What trends point to increasing use?

What barriers to implementation exist?

Methods

In order to answer my research questions, various forms of research were pursued:

Extensive review of academic publications, government and industry reports and popular literature. This was intended to provide a deep contextual understanding of the topics that frame
the research questions, in terms of global dynamics, historical perspectives, and current theory. It also provided a baseline understanding of current M&E practices, upon which interview questions and email queries were formulated.

12 in-depth semi-structured interviews with Brazilian academics, practitioners, policy-makers, and think tankers involved in upgrading. The interview guide is attached in the Appendix. Interviews were conducted in Portuguese, with one exception, over a period of two months in the summer of 2011. Interviews were audio recorded and notes were taken. Relevant commentary was transcribed and translated.

25 email queries of Brazilian experts on specific topics, including some follow-up questions to those who had been previously interviewed. This served to confirm and clarify certain speculations I had developed over the course of the research. It also provided insight into recent developments in M&E practice that had not yet been publicized.

2 weeks of participant observation research, with upgrading teams from the Housing and Urban Development department and community leaders of Diadema, São Paulo, Brazil. This research phase, tied to an internship, was intended to ground my knowledge in the actual practices of upgrading at the municipal level.

Research Limitations and Other Considerations

This study did not entail a comprehensive review of all upgrading programs, as this was not feasible given the quantity of such programs, their geographical distribution, and the constraints of my research timeline. As such, focus was instead placed on expert interviews and literature review, in an attempt to gain a broad understanding of the state of M&E practices in Brazilian housing and urban development. All interviews took place in Brazil’s southeast, and the experts’ knowledge of upgrading efforts was heavily biased towards this region.

I originally attempted to identify exemplary case studies of M&E practice in the informal settlements sector in Brazil. However, none was identified. In fact, surprisingly little information exists that offers assessments of current practice of M&E of settlement upgrades. Some of this discussion likely takes place within organizations and is not made publicly available. In the academic and research communities, the results and findings of various evaluations are certainly of interest, and have been for some time. However, meta-evaluations that assess and explore the methodologies and practices of
M&E of upgrading are only recently emerging as a topic of interest. I posit that the convergence of the development effectiveness agenda and results-based management, the maturity of now well-established upgrading program, and the push towards South-South knowledge exchange will promote an increase in the meta-evaluation of upgrading programs.

Organization of Thesis

I begin Chapter 2 with a discussion of the global context of urbanization, trends in informal settlements, and intervention strategies. In Chapter 3, I introduce the concepts of monitoring and evaluation and their role as a critical element in the development process. I also deconstruct common barriers and challenges to implementation. In Chapter 4, I focus on the Brazilian context, particularly the history of informal settlements and interventions, and current urban development and housing initiatives. In Chapter 5, I survey of the use of monitoring and evaluation within the Brazilian housing and urban development sector, and specifically within informal settlement upgrading. Finally, I provide some concluding reflections and recommendations for further research.
Chapter 2: Global Trends in Informal Settlements and Upgrading

In this chapter, I introduce global demographic trends and outline the modern world phenomenon of urbanization. I discuss the conditions of global urbanity and, more specifically, the proliferation of informal settlements. Finally, I present a brief survey of the strategies employed to address informal settlements, as well as some good practices. With this chapter, I intend to outline the global context in which the Brazilian case is situated. As a large “emerging economy,” Brazil does not quite fit the patterns of other developing countries. In terms of population growth and urbanization, Brazil has already experienced its peak rates of increase and is nearing relative stability. Meanwhile, much of the developing world, especially Africa and Asia, is still experiencing a period of rapid growth and massive expansion of informal settlements. The associated (increasing) demand for increasingly efficient upgrading programs highlights the need for Brazilian practices to be better understood and studied in detail.

World Population Growth and Urbanization

Since 1950, the world’s population has taken off, growing from 2.5 billion to 7 billion people in roughly 60 years. Due in large part to improvements in vaccinations, healthcare, water provision, sanitation and food supply, populations the world over are experiencing increasing lifespans and decreasing infant mortality. But, as women continue to gain access to and education around reproductive options in the coming decades, the exponential pace of population growth is predicted to slow, resulting in a peak or plateau between 8 and 10.5 billion (UN-ESA, 2010:1).

Brazil has already begun to experience this transition. Life expectancy has dramatically increased by over 20 years and the total fertility rate (children per woman) has dramatically decreased from 6.2 to 1.9 over the last half century (Population Division, 2010). The rate of population growth has also begun to slow (ibid).
Figure 1: Changes in Total Fertility (children per woman) over time
Figure 2: Changes in Life Expectancy over time
The world population boom has been paralleled with the demographic phenomenon of urbanization, and now, for the first time ever, half of the world’s population is in cities. The growth of the world’s cities has been attributed to relatively high urban birthrates, the annexation of towns on the urban periphery, and, most importantly, high levels of rural-to-urban migration (Cohen, 2006:69). In addition to the unprecedented scale of urbanization, the sheer pace of it is incomparable; “Cities have absorbed nearly two thirds of the global population explosion since 1950, and are currently growing by a million babies and migrants each week” (Davis, 2006:1). As such, the UN predicts that there will be 1.6 billion new urban dwellers by 2030, and by 2050 three quarters of the global population will be urban (UN-Habitat a, 2003: xxxi; Davis, 2006:2).

People continue flocking to cities for a variety of reasons. These drivers of rural-to-urban migration include forces both drawing people to cities and pushing them away from rural livelihoods. The urban...
draws are manifold: educational and employment opportunity; the cultural appeal of urbani ty, modern conveniences and consumer lifestyles; and the potential to join family or community members who may already live there. In addition to these attractive urban forces, the alternative of rural life has, in many regions, become increasingly difficult. In Brazil’s case, a post-war industrialization boom attracted millions of rural residents to seek work in urban areas. Several decades of high rural-to-urban migration followed, though rates are now tapering off (see Figure 4) (Population Division, 2010).

Due in large part to macroeconomic trends and international loan conditionalities, rural sectors in developing countries have experienced great challenges in dealing with the industrialization and mechanization of agriculture, the advent of surplus rural labor, commodity prices competing in a global market, removal of agricultural regulation and subsidies, and decreasing public investment in rural infrastructure (Bryceson, 2000:304). Brazil is a clear case of a country in which “capital-intensive agricultural modernization stimulat[ed] rural exodus towards large metropolitan cities” (Borges Lemos, et al, nd:2). To top it off, climate change impacts, like drought, desertification, and floods, inordinately impact rural agriculturalists and provide further impetus for urban migration. Thus, rural-to-urban migration can largely be characterized as the urbanization of the rural poor, who have essentially been stripped of any viable alternatives.

Figure 4: Brazil’s Proportion Urban Population (of Total Population) over time
Urban growth rates, however, are not consistent throughout the world. Whereas much of the developed world experienced an earlier wave urbanization due to the industrial revolution and now has a 75% urban population, the current round of urbanization is heavily concentrated in the developing world where only 45% of the population is urban (Population Division, 2011:1). Brazil was on the front end of the current urbanization wave, and has now completed the vast majority of its urban transition, with between 84 and 87% of the population living in urban areas (ibid; IBGE, 2010).

While the percentage of urban population in the developing world (45%) seems quite low compared with that of the developed world (75%), the rate of change is what is most striking: just 60 years ago, only 18% of the developing world population was urban (UN-Habitat a, 2003: xxxi). The city of Beihai, China currently tops the charts with a 10.5% average annual growth rate (Population Division, 2010). São Paulo’s growth rate maxed out at 4.6% annually in the 1960s (IBGE, 2010). London’s urbanization during the height of the industrial revolution was just 2.3% per year (Williamson, 1988:287). (For comparative reference, Vancouver’s annual growth is only 1.3%.) Currently, high urban growth rates are especially common throughout Asia and Africa, where the total urban population is expected to double between 2000 and 2030 (Population Division, 2011:1).

In terms of net population growth, cities of the developing world are expected to absorb 95% of all new urban dwellers (UN-Habitat a, 2003: xxxi). This accounts for virtually all of the predicted global population growth, as net rural population will essentially remain stable or decline (Population Division, 2011).

**New Urban Growth Typologies**

Several typologies of urbanization have emerged, including the global proliferation of mid-sized cities, as well as unprecedented forms and rates of urban concentration. Mid-sized cities of a million or more inhabitants have multiplied around the globe. There were 86 such cities in 1950, and now there are roughly 500 (Cohen, 2004:27). Small and mid-sized cities are expected to be the site of the majority of future population growth (UN-Habitat a, 2003:25). The phenomenon of extremely fast growth has also been experienced in some cities. For example, Dhaka, Bangladesh and Kinshasa, Democratic Republic of Congo are 40 times larger today than they were in 1950. Roughly fifty cities have annual growth rates in this 3-5% range, while Beihai, China, as previously mentioned, trumps all with its astounding 10.5% annual population increase. Finally, hyperurbanization or the extreme focus of growth in some metropolitan areas has resulted in megacities of ten million residents or more. In 1975, there were only
three megacities, and today there are 20-27 megacities, including both São Paulo and Rio de Janeiro in Brazil. This range exists because the definition of a megacity’s boundaries is “hazy and controversial” and census mechanisms vary greatly in accuracy (Pilling, 2011:1). Edward Glaeser calls them “cities on steroids” and David Pilling remarks on their “symbolic potency,” the zenith of our new urban age (2011:1). What they represent, however, is up for interpretation. To some, they are a symbol of opportunity; to others, a dystopic nightmare, perhaps dependent on where one sets his gaze.

**Expanding Urban Demands and Pressures**

The shape and quality of urban growth over the next century is likely the biggest development issue of our time. As Barney Cohen puts it, “Managing urban growth has increased in both scope and complexity and has become one of the most important challenges of the 21st century” (2006:63). Vast and fast urbanization brings a great deal of change and uncertainty surrounding the character and quality of urban life. It also places new demands on the ecological carrying capacity of the region to provide clean water and food while assimilating waste, the economy’s capacity to continuously offer new opportunity, as well as the functional capacity of cities’ infrastructure and administration to effectively absorb and provide for burgeoning populations.

The physical expansion of built up urban areas consumes rural areas and ecosystems, but the ecological footprint of cities extends far beyond their built form. “Developing countries will face intensified environmental problems due to urbanization,” states UN-Habitat (2003:xxxi). Concentrated population growth increases the demands placed on the region’s natural resources, like fresh water and agriculturally productive soils. Industrial activities, often associated with urban expansion, require additional resource extraction and use. Of course, there are significant waste outputs from urban and industrial systems, too, releasing waste matter and pollutants into the region’s ecosystems. Finally, the energy requirements for industrial production and urban lifestyles (which far exceed those of rural populations) further impact the environment. The following figure shows how the city of São Paulo expanded its footprint over time. The largely unregulated growth eventually reached some of the region’s primary watersheds, jeopardizing the water supply and inciting official government response.
In growing cities of the developing world, increasing stress has also been placed on the capacity of the economy to grow or shift in ways that provide sufficient livelihood opportunities for the populace. In fact, what we see in much of the world is “a massive disjuncture between demographic and economic growth” (Taylor, 2007:1). While the urbanization of the developed world was brought on by industrialization and accompanied by fairly continuous economic growth, this new phase of developing
world urbanization is, in stark contrast, characterized by very low to medium economic growth rates (Sheuya, 2008:298). The growth that does exist is concentrated among the rich, as Gini coefficients (the standard measure of income inequality) have been steeply rising since the 1970s (Taylor, 2007:1). So, in this historically unique situation, urbanization has “continued its breakneck pace ... in spite of falling real wages, soaring prices, and skyrocketing urban unemployment” (Gugler, 1997:43 in Davis, 2006:14). In Brazil’s case, however, mid century urbanization was in fact accompanied by industrialization, economic growth, and opportunity (roughly 1950-1980). Still, a great deal of wealth continued to accumulate in the hands of the wealthy elite (Neri, 2009:222).

With limited formal sector jobs available, the urban poor increasingly look to informal work. Taylor, however, points out that informal work is “no longer a stepping-stone to the formal sector; it is a simple survival strategy, nothing more” (2007:1). Davis further asserts that stagnant economies coupled with population growth create urban involution, or the continuous fragmentation of existing work into an ever-increasing number of pieces (2004:181-2). What results is “a downward spiral of increasing poverty” (Taylor, 2007:1). While Brazil experienced several periods of economic stagnation in recent decades, it seems to have emerged from this paradigm into its current phase of gradual economic growth. Coupled with increased social spending and progressive income policies, both poverty and inequality have decreased (Neri, 2009:222).

Many experts attribute these trends of unemployment, informality, inequality, and poverty to the structure and policies of the global economy. Restructured, globalized economies have not only contributed to the scale and pace of urban migration, but have conditioned the quality of economic growth within urban centers. Developing countries have been pressured into devaluing their currency and growing their export sectors, generally based in resource extraction or monocrop agriculture, not urban-oriented, labor-intensive production. International loan conditionalities and structural adjustment programs have lowered environmental and labor standards, promoted the deregulation of private enterprise, and weakened central government powers and social programs. All of these policies and the social insecurities they entail disproportionately affect the poor and the government’s ability to provide support to them.

Brazil, on the other hand, developed its economy through policies that promoted protectionist, urban-oriented industrialization and import substitution (Brainard and Martinez-Diaz, 2009:113). In the 1990s, it unilaterally liberalized its trade policies on its own terms (ibid), and relatively late in comparison with its neighboring countries (Neri, 2009:224). Given the size of the economy, its relative self-sufficiency (in
terms of agriculture and energy) and the progressed state of industrial production, Brazil had considerably more negotiating power than smaller, less developed countries. Nonetheless, persistent inequality and class-based exclusion have marred Brazil’s economic growth and development process.

The infrastructure and administrative capabilities of growing cities are also heavily strained by mushrooming populations. It is all too common for transportation, water, and electrical systems, among others, to be stretched beyond capacity (KPMG, 2012:5). City governments may be plagued by financial and human resource constraints, incapable of keeping up with the flood of increasing service demands (Santos, 1996:236). Milton Santos offers a detailed account of São Paulo’s growing pains, in terms of the economy, housing, transportation, health, education, pollution, crime and public administration. Each of these areas experienced significant difficulties and transformations in response to the metropolis’ rapid population growth.

**Accommodating a Growing Population**

Given the extraordinary pressures placed on developing cities, it is no surprise that many of their housing systems are woefully unprepared to shelter growing populations. In simple terms, with a growing population there is an increasingly high demand for affordable housing and an insufficient supply. Overly restrictive or burdensome planning and building regulations and processes can further stymie the legal construction of affordable housing. People respond to this formal housing shortage with a variety of adaptive housing strategies, including high density living within formal housing, varied forms of informal/ “illegal” housing or squatting, homelessness, and multiple combinations thereof.

In choosing house locations, poor urban families are often forced to make tradeoffs between accessible location and safety and security (UN-Habitat a, 2003:172). Central locations, or those with good transportation accessibility, generally provide better opportunities for employment, services and public programs. However, the central living options for poor families are typically overcrowded tenements or tenuous squatting arrangements with looming threats of eviction and/or natural hazards. O’Hare and Barke, writing about Rio de Janeiro, paint a clear picture that reflects urban realities worldwide: “Because standard, conventional housing is so scarce relative to need, and since even the least expensive dwelling units cost so much more than the low income family’s ability to pay, vacant land in and around the city becomes natural squatting grounds for thousands of poor families” (2002:230).
Informal Settlements

The housing options available to the poor are essentially limited to settlements that have one or more of the following characteristics: insecure residential status, inadequate access to safe water, sanitation and other infrastructure, poor structural quality of housing, and overcrowding (UN-Habitat b, 2003:8). So few alternatives exist such that “in the cities of the developing world, urbanization has become virtually synonymous with [informal settlement] formation” (Sheuya, 2008:298). Informal settlement is “the systemic, permanent, and prevailing form of urbanization [in the developing world]”, says Jamie Peck (2012:1).

Today, just about 1 in every 6 people around the world lives in an informal settlement. By 2030, the UN predicts that this proportion will rise to 1 in 3 (UN-Habitat, 2007:1). In the developing world, the majority of city dwellers already lives in informal settlements and the vast majority of global population growth is expected to be housed there, too. The proliferation of informal settlements is thus a global phenomenon, and what philosopher Slavoj Zizek calls “the crucial geopolitical event of our time” (2004:1).

Strategies to Address Informal Settlements

Actions towards informal settlements can generally be categorized as either proactive, providing direction and resources for future growth and development, or reactive, addressing communities already in place. The latter includes both productive and destructive responses—retrofitting or improving a community in situ or clearing, uprooting and displacing the community.

Proactive strategies to avoid slum proliferation include plans, policies and decisive actions that seek to retain and promote affordable housing and land stock. In theory, this may be accomplished through the development of publicly owned social housing, as well as market interventions such as rental stipends, home ownership credit and subsidies, price caps and rent controls. Further, developers can be required to construct a certain proportion of affordable housing. Land may also be explicitly zoned or earmarked for affordable housing, and reception areas for new population may be created. Many innovative proactive strategies have been implemented the world over, however they often fail to meet the full scale of demand. Lack of political will, strong developers’ lobbies, and financial constraints have led to programs that are only partially rolled out, with low quality and/or minimal reach/coverage.
More common are reactive strategies, which seek to address informal settlement communities that already exist. Clearance is one such strategy. While clearance was historically used throughout the world, it is now widely condemned by the international development community for the deep social and livelihood disturbances it yields. Nonetheless, clearance is still practiced within many countries, most commonly in places where marginalized populations have little voice in governance. There are, however, cases of collaborative resettlement, in which housing alternatives have been secured and communities voluntarily relocate. Additionally, even in the most progressive of in situ interventions, some amount of removal may be necessary. For example, space must be cleared for vital infrastructure for the community, or if housing dedensification is required for reasons of environmental health (e.g. creating space for improved ventilation in a dense cluster of houses in which moisture or cooking exhaust cannot escape). Over time, clearance has given way to other strategies that recognize that neighborhoods and communities are best not destroyed.

Other reactive strategies can broadly be categorized under the term intervention, referring to an action aimed at improving slum conditions. The two major intervention strategies are sites and services, which focuses on providing serviced plots and titling but leaves housing improvements in the hands of residents; and upgrading, which consists of more comprehensive physical improvements to existing settlements, the regularization of land and housing rights and the promotion of public programming (Gilbert, 2007:708).

Both sites and services and upgrading efforts can be limited by “the ideology of space,” which focuses on the physicality of slum conditions, as opposed to the capacity and livelihoods of residents (Roy, 2006:150). It’s important to recognize that interventions can sometimes take the form of superficial, aesthetic improvements, while ignoring social and economic aspects of quality of life. However, it must also be recognized that communities deserve at least a baseline quality of services and environmental conditions, which can provide health benefits, as well as a sense of dignity and community pride. Roy intends not to discount the importance of physical upgrading, but alerts us that purely physical upgrades are simply an easier fix than dealing with the underlying problems of structural exclusion.

Sites and services, championed by Hernando de Soto and favored for some period by the World Bank, has been widely critiqued for not addressing housing conditions. Further, such policies “legitimate the agenda of privatization” under the guise of “neocommunitarianism” (Jessop (2002), as cited in Roy, 2005:148), and open the door for gentrification and displacement. The costs of sites and services also far
exceeded those of upgrading (Werlin, 1999:1524). Upgrading, therefore, is currently considered a best practice.

Upgrading typically entails a suite of physical upgrades which may improve housing conditions, basic service infrastructure (e.g. water, electricity, sewerage, drainage, street lighting), community amenities (e.g. open space, meeting spaces), and hazard mitigation (e.g. slope or river bank stabilization). Tenure security strategies, which often involve legal elements such as land titling and regularization, are commonly pursued. Programmatic elements like healthcare, education, and livelihood support may also be promoted. While there seems to be a fairly straightforward recipe of upgrading elements, it should be noted that “there is no clear set of best practices for these upgrades, which range from small “acupunctural” insertions to expansive infrastructural improvements, from familiar government-led programs to designer-initiated projects” (Beardsley and Werthmann, 2008:1). Improved evaluation practices would support the production of such knowledge.

While local residents and community-based groups are obviously interested in improving the slum conditions of their neighborhood and their quality of life, a wide range of other actors may also be involved: local, regional and national governments; non-governmental organizations (NGOs); international financial institutions (IFIs); international development agencies (IDAs); UN programs; international professional associations; and experts, researchers, and academics. Each of these actors comes to the table with its own objectives, priorities, and strategies for addressing the slum conditions of settlements.

Interventions may involve many multiple entities: public works, utilities, planning departments, education boards, as well as the project proponents which may include any number of the previously mentioned actors and funding institutions or donors. Various jurisdictions may also be involved, further multiplying the organizational complexity of a project. It’s unsurprising then that many upgrading efforts have suffered from a lack of effective organization and management, with overlaps and gaps in responsibilities. This complex form of “integrated upgrading” is currently the preferred alternative in Brazil.

A team of Brazilian engineers explains the problem with isolated “sector initiatives”, due to the interconnectivity of city systems:

“Installing water supplies in a slum means higher sewage volumes that will require drainage. So when installing piped water in a slum, there has to be a new sewage system too. Drains for
rainwater have to be installed, otherwise it will flow into sewers. There has to be garbage collection to complement water supplies, sewage and rainwater drainage – in order to avoid solid waste blocking drains and sewers. There must be a suitable road system for garbage collection to be carried out properly” (Abiko et al, 2007:3).

As such, there has been recognition of the need to integrate these intervention elements in cohesive, coordinated upgrading strategies. While significantly more complex in terms of management, the efficiencies derived from maximizing synergies and phasing actions (such as breaking ground just once for utility connections, followed by paving) can lead to vastly improved project timelines, budgets, and outcomes.

Many researchers contend that project success is tied to levels of community participation throughout the process (Imparato and Ruster, 2003:1). However, others claim that this is “an important aspect of project design that has not been thoroughly examined” and requires more rigorous evaluation before judgment can be made (World Bank, 2006:17). Participatory upgrading is nonetheless widely recognized as a preferred intervention strategy. A vast variety of project design options and operational strategies exist under the participatory upgrading umbrella. Those who strongly support participatory upgrading promote projects that are as community-driven and managed as possible. Meaningful community involvement should be elicited during each phase of intervention planning and implementation: “It is now good practice to involve the communities from the outset, often through a formalized process, and to require a contribution from the occupants, which gives them both commitment and rewards” (UN-Habitat a, 2003:132).

Community empowerment has become an explicit objective of many organizations’ work. Writing in regard to an upgrading project in India, one development practitioner noted that, “The project left more than just new houses. It left a legacy of community dialogue, debate, engagement, and empowerment” (English, 2012:1). However, empowerment is a somewhat abstract concept that is difficult to define and measure. While the rhetoric around community participation is now very commonplace, the degree to which it is actually implemented varies greatly between agencies and projects and “has mostly been adopted on a limited scale or at the level of demonstration projects” (ibid).

In addition to project-level intersectoral coordination and quality participatory process, there is recognition that city-wide or region-wide informal settlement improvement strategies are needed. While isolated upgrading projects may bring great benefits to specific segments of the local population,
they do little to benefit the urban population as a whole. UN-Habitat reports that, indeed, interventions have recently “been characterized by a move from sectoral, project-based approaches to more comprehensive urban and housing programs” (a, 2003:142). “Significant improvement in low-income communities can be achieved only through a combination of small-scale, local initiatives and massive upgrades to sanitation, transportation, and employment infrastructures, which have to be orchestrated at the national and international levels. Absent the larger initiatives, the small-scale insertions might legitimately be criticized as appeasements more than substantial improvements” (Beardsley and Werthmann, 2008:3). Funded, permanent programs can provide the institutional structure and financing for follow-up and maintenance. Such arrangements contribute to the long-term sustainability of intervention efforts on a broader scale (ibid:132).

Trends in global demographic transition and informal settlement growth underscore the importance of settlement upgrading strategies. While strategies have evolved over time and locally specific iterations have emerged, there is still a significant amount of work to be done in developing more efficient and effective upgrading techniques that can be scaled up to meet the massive demand. For this reason, we look to Brazil to understand some of the lessons learned in their experiences of early urbanization and upgrading. Monitoring and evaluation systems are tools to support this inquiry and to continue advancing upgrading techniques.
Chapter 3: Monitoring and Evaluation as Critical Elements in the Development Process

In this chapter, I present an overview of current literature and discourse around monitoring and evaluation theory and practice, focusing on aspects that relate to settlement upgrading work. I define monitoring and evaluation and discuss their purposes and uses. Then, I outline the trends and debates around the application of M&E practices, along with an exploration of common challenges and barriers to implementation. I conclude the chapter with a review of prescriptive texts for monitoring and evaluating settlement upgrades.

Introduction to Concepts

Humans are endowed with the amazing capability to learn over time. Human organizations similarly have the capacity to learn from mistakes and aim to repeat or replicate successes. Most organizations engage in some form of reflection on the work they’re doing and what they’ve accomplished, and tend to incorporate this knowledge into future work. Monitoring and evaluation (M&E), as explained herein, is simply a structured form of this natural practice.

As organizations and their functions grow in complexity, the knowledge development process also becomes more complex. In order to effectively analyze current work and pass on learnings within an organization, a framework for knowledge development is required. Monitoring and evaluation practices can help provide this structure.

Though often grouped and considered as a single practice, monitoring and evaluation are in fact distinct activities. Monitoring is a descriptive function that provides information on inputs and outputs, as well as “where a policy, program, or project is at any given time relative to its targets and outcome goals” (Goergens and Kusek, 2010:2). Evaluation is an analytical process that explains how well the program has achieved its intended results (either explicit or implicit) and why (Weiss, 1998:4). It may be applied to an ongoing or completed policy, program, or project. Of course, organizations amend and adapt these basic definitions to meet their own needs.
**M&E in Theory and Practice**

In terms of urban settlements, monitoring and evaluation are approached from the fields of planning, program evaluation and public administration (see Seasons, 2003:431). There is a large body of literature on the topic. Within planning literature, the role of monitoring and evaluation has evolved to reflect shifting planning paradigms/models and their theoretical positions. The emergence of monitoring and evaluation in planning theory and practice dates back to the rational comprehensive model of the 1950s and 1960s. Within the following two decades, the concepts and their principles received significant discussion in planning literature. However, the complicated and highly technical prescriptions of this era were rarely implemented and monitoring and evaluation fell out of fashion. M&E experienced a resurgence in the mid 1990s, amidst calls for increased efficiency and effectiveness in the public sector and international development spheres (Seasons, 2003: 431). At present, “unlike applied sciences, such as medicine, where theory, policy, and practice tend to move sequentially, trends in evaluation theory, policy, and practice exist in a common space and influence each other, but directionality varies” (USAID, 2009:3). As will be discussed later in the Barriers to Implementation section, there is a significant gap between evaluation theory and practice.

Many actors proactively participate in urban development processes in developing world cities: local residents and civil society organizations (CSOs), local government agencies, higher levels of government, international development agencies, aid agencies, and financial/banking institutions. Monitoring and evaluation practices can vary greatly between different organizations, depending on their culture, size, age, ideological background, etc. Each has its own form of operation, though those that work together tend to inform each others’ operating protocols. This is particularly true when money changes hands and accountability reporting is expected.

**Evaluation Categorizations**

A vast variety of evaluation categorizations exists, with variations on the evaluating actor, the object of evaluation, and the process or structure of evaluation. Some of the most common distinctions are discussed below.

Evaluations may be conducted by a range of different actors, each of whom imbues the evaluation process and product in different ways. Evaluators may be the same individuals who implemented the project or program. In other cases, evaluators may be from within the implementing agency, though
independent of the project implementation functions. They may also be from within the “beneficiary community,” if partaking in participatory evaluation. Finally, external auditors from a funder may conduct evaluations, or a separate evaluation entity may be contracted to conduct evaluations of many kinds. Needless to say, the level of impartiality can vary immensely among different evaluators, especially if evaluation methodologies are not rigorous and standardized within the organization.

The object of evaluation may vary greatly, with M&E being conducted at many levels: a process within a project, an individual project, a countrywide program, an entire agency, etc. At any of these levels, an evaluation may be structured to assess elements of design, implementation and/or results (Goergens and Kusek, 2010:2). An evaluation of an initiative that is currently underway, referred to as a formative evaluation, may be useful for making mid-stream adjustments (Alkin, 2011:11). Some types of evaluation consider a project plan (or design) as the object of evaluation, in order to assess a plan’s quality, perhaps before implementing it or replicating it. Other types of evaluation assess how well a plan has been implemented (i.e. was the action plan closely followed), sometimes referred to as conformance evaluation (Laurian et al, 2004). Still other forms of evaluation seek to determine the results of project or program implementation, sometimes called summative evaluation (Alkin, 2011:12).

Project results exist at various levels. Presented here is one of the more common frameworks: output, outcome, impact, as interpreted by the Kellogg Foundation (Figure 6).

**Figure 6: Logical Framework**

![Logical Framework Diagram](image)

Source: W.K. Kellogg, 2001:1
In this model, outputs are “the direct products of program activities and may include types, levels and targets of services to be delivered by the program” (ibid). Outcomes are defined as “the specific changes in program participants’ behavior, knowledge, skills, status and level of functioning”, while impacts go beyond to describe “the fundamental intended or unintended change occurring in organizations, communities or systems as a result of program activities” (ibid). Effects may be observable in each of these categories over different periods of time.

However, there is no consensus on the terms and definitions used for these categories of the results hierarchy. Some frameworks use other labels, include fewer results categories, and/or assign different time parameters for the observation of results in each category. Practitioners have also found that these terms often do not translate well into local languages, which results in the use of confusing and “clumsy translations” (De Coninck et al, 2008:60). This is further complicated by the fact that many local organizations work with multiple donors, and thus have to use multiple evaluation frameworks and reporting formats.

There is much debate around the definition of impact evaluation, a term that is increasingly appearing within development literature. It typically refers to assessments of longer term outcomes and impacts. Some parties define it as a narrow set of assessments that employ experimental, and in some cases quasi-experimental, research methodologies. Such parties commonly contrast impact evaluation with the less rigorous effects assessments. More rigorous evaluations try to measure “the effects that can be attributed to a particular social development program after controlling for other factors that might otherwise account for changes observed in the population” (Center for Global Development, 2012:1). In order to control for other factors, robust impact evaluations incorporate comparison group measures which may include random assignment and a control group or statistically derived methods of comparison (ibid). Significant training and expertise is needed to design and conduct such technical assessments. This will be briefly addressed in the following section on the purposes of evaluations. The unfolding debate around impact evaluations and their increasing popularity will be further discussed later in this chapter.

**Evaluation’s Purpose in Urban Development Programs**

M&E are always information-gathering exercises. However, they may serve a number of different purposes, depending in part on the actors involved. In discerning evaluation purpose, it is helpful to
consider: Who is undertaking the evaluation? What do they seek to understand and why? How will this information be used?

The great majority of M&E theory and literature frames its primary purpose as the production of information that is internally useful to an organization’s program development. When put into practice, however, M&E is steeped in politics of legitimization, justification, and accountability, both internal and external to the organization. This section discusses the various purposes that M&E serves (or is suspected of serving) in human settlements programs: feedback for learning; accountability and justification, and; supporting the “development industry”.

Monitoring and evaluation are considered integral parts of most models of the planning and program implementation process. They are intended to track progress and assess results and efficacy. This provides the instrumental feedback that is necessary to adjust projects mid-stream. Imparato and Ruster even state that “one of the main reasons for the partial failure of many upgrading initiatives is the lack of a reliable monitoring and evaluation system that may sound an alarm when things are going less than well” (2003:200). M&E also provide the information needed to improve project design over time and inform future decision-making (USAID, 2009:7). The Center for Global Development puts it even more strongly: “As with treatments studied by medical researchers, there is an ethical imperative to evaluate social programs in order to know whether they are effective, whether they have unintended negative effects, and whether their costs are justified by their impact” (2012:1). All of these elements are part of a continuous process of iterative program and institutional learning, showing that evaluation can be used to improve programs and organizations.

As the complexities of development are further understood, models of development assistance and aid gradually shift to reflect them. M&E provides integral information to bolster our understanding of development dynamics and support complicated policy and program decisions. As international aid and development tackle ever more complex issues, “shift from more visible ‘projects’ to less visible ‘programs,’” and even contribute to general budget support, monitoring and evaluation take on an increasingly important role (ibid).

Just as often as improving outcomes, however, evaluations are used to prove the program, organization, or its champions. M&E are often used to demonstrate accountability, and accountability commonly follows a money train. Much development work is financed through international donors or central governments who pass funding through a chain of middlemen and implementing parties. Each party
receiving funding must prove that the money is being used for the stated purpose. In recent decades, even further emphasis has been placed on ensuring that money is used efficiently, and positive outcomes have been maximized (USAID, 2009:1). M&E are some of the tools used to prove this.

Most development actors are accountable to multiple parties. For “partner organizations,” often community-based groups or NGOs operating locally with support from donors, evaluation may have implications for future funding. Publicly run agencies may evaluate to report results to higher levels of government, again with implications for funding and political capital. Results from publicly managed programs may also be used to prove (or disprove) a politician’s actions to the public. Evaluations may even be commissioned by politicians for the purpose of highlighting their accomplishments. On the flip side, there is evidence of civil society organizations (CSOs) increasingly demanding evaluations, to hold government and development actors accountable when there are suspicions of budget misuse or general underachievement (Conlin and Stirrat, 2008:201). Development agencies, for their part, are also shifting towards being more accountable and responsive to CSOs and local communities (ibid:202). Development agencies and donor countries may also use evaluation to prove results to taxpayers and public decisionmakers.

The international development field receives heavy criticism for its systems of knowledge production and management. Some critics contend that many evaluation practices serve to perpetuate the “development industry” and its spawn, the development evaluation industry (see Dichter, 2003). Actors from developed countries typically design projects and programs and their evaluation schemes. In doing so, they choose what is worthy of measurement (which may reflect “donors’” criteria), assign specialized language, and train professionals qualified to measure and report in that language. Knowledge production is thus professionalized and considered to be beyond the capacity of a lay person. The results that are produced through such evaluations commonly justify the work of the “development industry”.

While evaluation continues to serve a learning purpose, clearly it is also “taking on an increasingly visible political profile” (Conlin and Stirrat, 2008:201). It is integrally linked to political and funding accountability, often with significant implications for continued future support. It may also play a role in justifying projects, programs, policies, or even the development industry as a whole. When these ulterior uses of evaluation are pursued, it is all the more important to be cognizant of the identity and role of the evaluator and how this may influence the evaluation process and product.
Increased Application of M&E in Development

Trends show that monitoring and evaluation are increasingly applied in development projects and programs. USAID states that “the evaluation of social programs, including international development programs, emerged as a distinct field in the late 1960s and early 1970s” (USAID, 2009:4). In recent decades, the “development effectiveness agenda” has surfaced and evaluation efforts, aimed at improving the effectiveness of development initiatives, have intensified. By the early 1990s, OECD reported that, “essentially every major actor in development work has made significant commitments towards increased monitoring and evaluation of their efforts within the last 20 years” (OECD, 1991). Between 2005 and 2011, four major international conferences on aid effectiveness (Rome, Paris, Accra, and Busan) were held and commitments were made towards managing for results, improving transparency and promoting mutual accountability (OECD, 2012:1). Targeting, measuring, and reporting on impact has thus become a central element of aid and development processes.

At this point all major development actors promote the use of M&E, with normative frameworks (e.g. methods, quality standards and good practices) for evaluating programs and projects. USAID, for example, has recently undergone a major transformation in its evaluation practices by developing and rolling out an official evaluation policy. This policy recognizes the roles of both accountability and learning and emphasizes transparency by posting evaluations online for public use (USAID’s Development Experience Clearinghouse: www.usaid.gov/evaluation) (USAID, 2012). Other donors have also recently enhanced their evaluation efforts, with new standards of rigor (e.g. AusAID, NZAID, the World Bank and the Millennium Challenge Corporation in the U.S) (USAID, 2009:2).

It is increasingly common for organizations to have dedicated arms or semi-independent evaluation entities with some level of independence from other implementation functions within the organization. USAID reports that many donors have also increased the importance of evaluation roles within their organizational structure, “elevating their evaluation offices to report either to the head of the agency or its board of directors” (2009:2).

A multitude of inter-organizational networks of evaluation design and practice, as well as advocacy oriented initiatives have been established. OECD hosts a large network for development evaluation and has compiled a fantastic (though incomplete) clearinghouse of the evaluation documents of the Asian Development Bank, African Development Bank, European Bank for Reconstruction and Development, Inter-American Development Bank, International Finance Corporation, International Monetary Fund,
United Nations Development Programme, the World Bank and a plethora of other donor organizations. The International Initiative for Impact Evaluation (3ie) has also been formed to advocate for, help fund, and improve the quality of impact evaluations of development programs. The organization has established the *Journal of Development Effectiveness*, as well. Amidst calls to “enhance the evaluation capacity in the developing world” through improvements in data availability and training (Conlin and Stirrat, 2008:202), several big development actors have banded together to form CLEAR (Regional Centers for Learning on Evaluation and Results), a new initiative that provides training and resources for monitoring and evaluating development programs, with regional centers on each continent.

In addition to decades of rising evaluation efforts driven by development and aid agencies, many developing world governments are demonstrating internal initiative, with a “present push towards evidence-based policies” (Conlin and Stirrat, 2008:203). These governments have recognized that the evaluation of outcomes of different domestic and international efforts can provide some of the data required for future decision making on complex social, economic, and environmental issues.

South Africa’s Department of Human Settlements, for example, has embarked on several projects to evaluate the impacts of their work. A 2011 report, prepared with technical collaboration from the World Bank, details the impacts of three different informal settlement interventions (involving upgrading and some resettlement), in terms of health, security, education, household composition, income and expenditure patterns, employment, child development, tenure security and housing upgrades, and social cohesion (Department of Human Settlements, 2011). In an effort to isolate the effects of the programs, the study includes assessments of control or comparison groups. The motivation for the study is “to support evidence-based policy, where decisions are made based on empirical evidence of what does and does not work” (ibid, 7). Research for this thesis did not include a more thorough assessment of South Africa’s monitoring and evaluation practices around informal settlement upgrades.

**Discourse Around “Good Practices”**

The discourse around good practices of evaluation continues to evolve. Despite international moves towards establishing evaluation protocols, development theorists and actors still prescribe a wide range of evaluation practices. The main areas of distinction among preferred evaluation methodologies are research structure, the makeup of evaluation teams, and the form and level of stakeholder involvement.
The issue of research structure and rigor is a central topic of debate. Many practitioners contend that M&E methodologies are not one-size-fits-all; they should be adapted to the contexts in which they are being applied. Oliveira and Pinho note that “the evaluator should structure his or her methodology according to the specific nature of the situation and should not follow, in a rigid way, a number of standardized procedures” (2010:349). Patton further explains that “every evaluation involves the challenge of matching the evaluation process and approach to the circumstances, resources, time lines, data demands, politics, intended users, and purposes of a particular situation” (2011:15). Among other things, this means tailoring evaluation structure to the capacities and needs of the organizations that will collect and use the information. One group of practitioners from the developing world has advocated for evaluations including “a small sample size with key indicators, enabling the organization to repeat M&E exercises regularly and to use a more participatory approach” (De Coninck et al, 2008:37). Others echo the sentiment that evaluation should be simple, easy to understand and easily operational (Seasons 2003 in Oliveira and Pinho, 2010:350).

Still other practitioners promote historically-informed ‘interpretive approaches’, and accounts based on narrative (Conlin and Stirrat, 2008:200-1). There is evidence that pragmatic mixed method approaches, incorporating a range of qualitative and quantitative research, are gaining traction (Khandker, 2010:18). These methodologies however, need to be seen as legitimate to policy-makers: “One of the major challenges facing the development evaluation industry is… persuading policy-makers of the validity of the methods increasingly used in evaluation, methods which recognize the complexity of the contemporary situation” (Conlin and Stirrat, 2008:204).

This drive towards improving validity has resurrected recommendations from mid-1970s evaluation theory: randomized scientific experimental trials (USAID, 2009:6). Championed by the MIT Poverty Action Lab and the Center for Global Development (CGD), this research methodology is highly structured and generally considered quite rigorous. Randomized trials are typically applied to large programs, as a base number of participants and comparison group members are required for the results to be statistically sound (Alkin, 2011:18). The World Bank has even published a document on how this methodology might be used to assess the impacts of settlement upgrading (2006) (The South African study mentioned in the previous section followed this impact evaluation methodology). However, this “theory-driven, outcome-oriented, hypothesis-testing” form of evaluation has come under fire from practitioners who advocate for more “responsive” and “methodologically fluid or evolutionary”
evaluations (USAID, 2009:4). It has also received heavy criticism of oversimplification, impracticality, ethical concerns, and “outdated” understandings (Conlin and Stirrat, 2008:197,204).

The ethical concerns arise around “deliberately leaving out a needy population from the project and spending much money on data collection” (De Coninck et al, 2008:58). Many other evaluation approaches, like outcome mapping and contribution analysis, seek to draw lines of causality (between the project’s actions and the observed results), but without the ethical issues around control groups (Smutylo, 2005:1).

Organizations of different sizes, with different resource budgets need to strategically develop M&E plans to fit their needs. It is important to determine the level and frequency of evaluation that is needed and feasible, based on the organization’s and the project’s context. For example, impact evaluations may not always be needed if an organization is working with a tight budget, on a fairly standard project. Organizations should weigh the resources used for extra evaluation exercises and the outcome of these learnings. An M&E plan should be crafted accordingly.

De Coninck et al write that, “Elaborate studies with many open-ended questions and participatory appraisal exercises can be especially burdensome. While a large organization with dedicated task forces may opt for large surveys, a mid-size one [may opt] to carry out assessments on a sample basis at larger intervals and to involve those collecting information in its compilation as well.” (2008:49).

In the end, it is widely considered that “a continuum of valid evaluation methodologies exists and no single approach is right for every program evaluation situation” (USAID, 2009:14).

There has long been a healthy debate around who should design and implement evaluations. Evaluation learnings may be most useful to professional and organizational development when evaluations are performed by those who were involved in the project/program. Clearly, however, there may be vested interests in evaluation results, so many theorists and practitioners advocate for independent evaluations performed by those not directly involved in the program. The Center for Global Development points out that “the program designers, implementers and funders often have a preconception about whether the program is achieving its aims, and may have a vested interest in the evaluation results; therefore, they may not be able to look at the evidence with an objective eye” (2012:2). Still, there are a variety of opinions on how independent is independent enough. Given the emergence of the development
evaluation industry, with tens of specialized firms, there are also vested interests in promoting the idea that only external, outsider-conducted evaluations are valid.

In the context of increasing partnerships between development entities, the makeup of evaluation teams is a prime topic of discussion (Conlin and Stirrat, 2008:201). Multiple models of joint and collaborative evaluations between organizations have been developed. European donors are showing leadership in conducting joint evaluations with their partner organizations (USAID, 2009:2). It is important to note, however, that joint evaluations “vary considerably in the degree to which they utilize highly participatory evaluation methods” (ibid).

Participatory evaluations which incorporate input from beneficiary groups are widely promoted as an ideal form of evaluation, and have been used in a spectrum of trans-sectoral applications (Estrella and Gaventa, 1998:5). These approaches are not new; they emerged in the 1970s, but have “made new inroads over this decade” (USAID, 2009:8). A range of overlapping terms are now used to describe participatory evaluation methodologies: participatory evaluation; participatory monitoring; participatory assessment, monitoring and evaluation; participatory impact monitoring; process monitoring; self-evaluation; auto-evaluation; stakeholder-based evaluation, and; community monitoring or citizen monitoring (Estrella and Gaventa, 1998:4). While the rhetoric around participatory evaluation is now widespread, the form and level of beneficiary participation in evaluation varies greatly among organizations and practitioners, and “fully participatory evaluations are the exception rather than the norm” (USAID, 2009:9).

Participatory approaches are favored for multiple reasons: ethical imperative, the value of beneficiary insights, and promoting beneficiary/partner ownership and empowerment. From an ethical perspective, “beneficiaries must have a say in what is being planned in their name... and have a right to comment on the relevance, quality, and effectiveness of the services provided to them, on whether the change has had impact on their lives, and from a wider perspective, on the strategies used for “their development” (De Coninck et al, 2008:92). Further, beneficiaries’ insights (such as on unintended changes) are vital for learning from projects and improving the quality of work. When individuals participate in an evaluation process, they may also feel more ownership in, trust in and connection with the evaluation results. This may improve the likelihood that evaluation results and learnings will be utilized for future decision making and project planning within the beneficiary community. Evaluations are also viewed as “contributing to ‘empowerment’, which is now a central theme in contemporary development thinking” (Conlin and Stirrat, 2008:196). From this lens, participatory evaluation may be understood as “a process
through which marginal and disempowered groups are able to gain skills and influence through their involvement in evaluation” (ibid:201-2). The aim is to create evaluation experiences that “will yield longer-term, self-determination capacities among local participants” (USAID, 2009:9).

While participatory evaluation carries ostensibly noble and lofty goals, they may be lost in practice. There are reports of projects that enlist locals under the guise of participatory M&E; “beneficiaries are used as providers of cheap labor to gather data” (De Coninck et al, 2008:61). Participation may in fact be burdensome to participants, with excessive time and labor requirements for insufficient return. Some critics contend that “we rarely see local people meaningfully involved in M&E” (ibid:93).

Well designed and managed participatory M&E should be meaningful and useful to all parties. An international group of development practitioners recommends:

“Beneficiary needs should largely determine their role in the M&E process... As long as the information needs of both beneficiaries and implementing organization coincide, the former are generally willing to contribute. If needs are different, however, compensation (such as payment) needs to be provided.” (De Coninck et al, 2008:92).

According to these practitioners, voluntary self-determination of role is a cornerstone of responsible participatory M&E design.

Certainly, dozens of other evaluation methodologies and approaches have been developed for particular purposes or contexts. Appreciative inquiry, which is based in theories of organizational change and grounded in the affirmation of existing assets, may be used to guide evaluation and integrate learnings into the program or organization (Preskill and Catsambas, 2006:2). Developmental evaluation is a methodologically flexible approach that was specifically designed for complexity and uncertainty, and aims to support innovation and adaptation to dynamic circumstances (see Patton, 2010). Many other approaches, reflecting a spectrum of philosophical stances around development, organizational change, and learning, are actively promoted by academics and practitioners.

Despite these varied approaches to research design and implementation, there is near consensus on some basic principles around M&E. A minimal overview of important issues follows herein; a more detailed list of commonly used principles for planning evaluation is presented in Oliveira and Pinho’s work (2010:355).
The M&E plan should be developed as an integrated element of the project or program plan, right from the beginning. This means, among other elements, identifying objectives and indicators that feed into the M&E plan (Oliveira and Pinho, 2010:355). From an operational standpoint, this means recruiting and training M&E staff before the project begins, as well as investing in continued capacity building (Bamberger, 2009:55). Once the project is already underway, it can be difficult to collect baseline data (though some methods for reconstructing this data have emerged; see Bamberger, 2009).

Evaluations should also be developed with their end use in mind. An entire body of literature exists on “utilization-focused evaluation,” which carefully considers the end use and users at every step of the design and implementation of the evaluation (see Patton, 2008). As such, there is close collaboration with the end users throughout the process. Even more conventional evaluations that are not wholly focused on the end user should package results for the intended audience, so the information is useful to them (Seasons, 2003:437). This may entail a good deal of work, as researchers note that there is “a widening and much more varied audience for the products of evaluations” (Conlin and Stirrat, 2008:198). Furthermore, in the context of increasing partnership efforts in development, evaluators must attempt to harmonize “often contrasting systems of evaluation employed by donors and partner countries” (Conlin and Stirrat, 2008:196). It can be very challenging to design an evaluation process and product(s) that meet each party’s needs.

M&E systems themselves should be subject to regular review, as well. Meta-evaluation techniques that assess the rigor and validity of individual evaluation methodologies and plans are emerging to meet this need.

Despite the wealth of literature and resources on the topic, monitoring and evaluation are often an afterthought in project design, budgeting, etc. The following section introduces the myriad barriers and challenges that inhibit broader implementation of M&E good practices in social programs and development work.

**General Barriers and Challenges in M&E Application**

The gap between evaluation theory and practice is widely recognized (Seasons, 2003; Oliveria and Pinho, 2010; Khakee 2003). In practice, evaluation is applied infrequently and often does not follow the guidelines set out by researchers (Oliveria and Pinho, 2010:344). One of the more thorough metaevaluation studies, conducted by Seasons, shows that despite trends towards “growing activity in
monitoring and evaluation in many American and Canadian cities, the underuse of monitoring and
evaluation is perplexing” when considering the resources at hand (2003:431). While evaluation theory
stresses the importance of impact evaluation, this same study of North American planning practice
found that evaluations generally focus on results and outcomes, without reference to impacts (ibid: 434-5). For example, the number of roads paved may be monitored and reported on, while its impact on the
local population in terms of health, mobility, accessibility, employment, etc is typically not analyzed. So,
the “evaluation gap” can be traced to a number of shortcomings in terms of the quantity and quality of
evaluation practice.

This section presents an overview of common problems in M&E application, which provide some insight
into why the theory-practice gap exists. This includes: problems within evaluation methodologies;
problems with the implementation of evaluation, including organizational culture, and; problems with
the presentation and use of the information gathered and produced.

*Problems within Evaluation Methodologies*

Many challenges are presented by evaluation methodologies, for which there is no consensus on a
number of substantial components. Three such challenging areas will be discussed herein: timeframe for
evaluation implementation, attribution of results, and complex objects of evaluation.

Within the development field in the past two decades, “there has been an increasing stress not on
outputs but on impact and the effect of development assistance” (Conlin and Stirrat, 2008:195). However, impact assessment presents a slew of difficulties, in terms of methodology and project
management cycles. Impact evaluations should take place in the window of time between too soon
(impacts not yet felt) and too late (results not relevant for policy-making). Determining this timeframe,
however, is not a straightforward task. Especially in the case of informal settlement upgrading, in which
multiple streams of action roll out at different times (i.e. infrastructure improvements may be
immediate, while land titling may take years to complete), it is difficult to discern the appropriate time
to conduct an impact evaluation.

Attribution, or discerning a cause-effect relationship between development actions and observed
realities, is a serious methodological challenge for evaluators: “How far can one be certain that
particular changes have been the result of particular development interventions?” (Conlin and Stirrat,
208:195). Simple comparison reports of indicators before and after project implementation are not
always considered sufficient. Evaluators are increasingly attempting to isolate causality, or draw a clear link between program actions and changes in the local situation. This means discerning a counterfactual, or an understanding of what would have happened to the beneficiary group had the intervention not occurred. It also means sorting through the “nonplanning factors (e.g. political decisions, changing market conditions) that often influence the outcome of planning policies and programs” (Seasons, 2003:435). In other words, “At the impact level, cause-effect relations are usually neither clear nor very direct, as a number of other factors and actors may have an influence” (De Coninck et al, 2008:18).

In the development assistance sphere, certain trends in practice have further complicated the notion of attribution. First, there are trends towards supporting general budgets, as opposed to project-based or sector-specific support. Second, the increasing prevalence of multi-actor partnership initiatives leads to a “complex intermingling of financial and technical inputs” (Conlin and Stirrat, 2008:199). These changing operational structures mean that the direct effects of donor dollars are increasingly difficult to track (ibid:196).

Even further challenges are presented within evaluation methodology when the object of evaluation is a nebulous or complex concept. For example, some evaluations set out to discern impacts in areas such as poverty, social exclusion, and empowerment. However, these terms have widely debated and varied definitions, depending on socioeconomic contexts and the intentions of the assessor, among other factors. As their definitions vary, these complex concepts also have a variety of systems of measurement which typically incorporate a number of weighted indicators. Their measurement is thus often a complicated endeavor, and the results are not easily comparable due to a lack of universal agreement on definition and methodology.

**Problems with the Implementation of Evaluation**

Once an appropriate methodology has been determined, there are still a number of barriers to successful implementation of an M&E initiative. The three central issues discussed herein are: lack of reliable data; funding constraints, and; organizational culture and resistance to evaluation.

There are vast differences in data availability and reliability, between countries and regions and even between neighborhoods in the same city. While cities in America and Canada have a “significant amount and variety of easily accessed resources” (Seasons, 2003: 431), data for many poor countries “is either absent, or scarce and unreliable” (De Coninck et al, 2008:132). More specifically, “most [developing
world] cities lack accurate, current data on land conversion patterns, number of housing units (informal and formal) built during the past year, infrastructural deployment patterns, subdivision patterns and so forth” (Brennan in Davis, 2006:45). Population statistics and data on basic quality of life indicators may also be weak or missing. (Davis reports on major discrepancies in official population documentation in Thailand, Mexico, Indonesia, and Malaysia (2006:26)).

Within cities, there may also be large differences in data availability and reliability between formal and informal neighborhoods. “Accurate statistics [of informal settlement populations] are in fact difficult to come by, because poor and slum populations are often deliberately and sometimes massively undercounted by officials,” says Davis (2006:26). De Coninck et al echo these sentiments and add that data may be intentionally undifferentiated (for example to focus less attention on poorer sections of the population), or may be manipulated for political uses (2008:132). However, they also point out some valid logistical difficulties involved in accurately collecting data in/on informal settlements, based on the inaccessibility of certain areas, including complicated networks of access points into residences (ibid), as well as the hesitation of many residents to take part in surveys or interviews.

Apart from political and logistical factors, data gaps are commonly attributed to a “lack of resources to regularly collect and store it” (De Coninck et al, 2008:132). Human resource, IT and budget constraints are a major issue when proposing additional operational requirements, such as increased data collection or monitoring and evaluation initiatives. In such cases, M&E efforts must be justified as a worthwhile and cost effective investment. The previously listed constraints may actually be the impetus for M&E efforts, as overburdened organizations look to review their program portfolio and improve organizational efficiency.

However, funding constraints also mean that organizations seek to cut corners in their evaluation practice. As robust qualitative data are typically more expensive to collect and process than quantitative data, the former are commonly minimized (against the prescriptions of most evaluation theorists). The cost of impact evaluation also exceeds that of basic output monitoring. So similarly, impact evaluations are less commonly implemented.
Embedding M&E within an Organization

One of the greatest barriers to evaluation is that of organizational alignment and support. At its most basic, this means committing adequate staff time and budget to evaluation activities. Staff training and capacity building are also required in order to conduct consistent, quality evaluations.

Most important, however, is embedding evaluation practices within the organization’s culture. This is no small task. It is helpful to consider M&E as more than just a framework; it is substantively a practice of reflection, open communication, and trust. These practices are commonly considered some of the more problematic elements of interpersonal relationships. When applied within an organization and its complex network of relationships and power structures, these practices are unsurprisingly met with some resistance. Generally speaking, “larger and older organizations, where practices and systems are entrenched, will find change difficult” (De Coninck et al, 2008:81). However, small organizations may also be daunted by increasing demands for evaluation, as staff and budgets may already be overextended. Certain evaluation methodologies or approaches may be met with more resistance, while others are intentionally designed to minimize resistance (e.g. appreciative inquiry).

Many organizations are introduced to M&E as a system of accountability reporting that is required by their funders. Among these partner development organizations, there is commonly “a perception of [M&E] as imposed, technical, and expensive” (De Coninck, et al, 2008:4). It can be difficult for such organizations to adapt to what is often an “inflexible application of instruments” (ibid). “When a [M&E training] facilitator adopts an ‘expert’ terminology and method, or when [M&E] fosters a directive, top-down vision of development,” the process can be very disempowering to the local organization (ibid). And the negative connotations don’t stop there.

Organizational culture heavily influences perceptions and behaviors around M&E. Some organizational cultures foster open inquiry and criticism, and embrace evaluation processes. Others do not.

“Learning organizations embrace evaluation as a means of enhancing the planning process. Opposite these are organizations that are averse to change and avoid criticism and tend to regard evaluation with suspicion and hostility” (Oliveira and Pinho, 2010:350).

Organizational cultures are also deeply imbued with the culture context in which they operate. In certain cultures, interpersonal interactions with elders or those higher in an organizational hierarchy may be heavily codified/prescribed. Questioning or criticizing the ideas or actions of such individuals
may be a violation of respect. As such, staff may be very reticent to provide input or ask questions, let alone offer criticism. De Coninck et al also point out that, in some cultures, the term “monitoring” is closely associated with policing and can thus evoke defensiveness and distrust (2008:108).

Beyond the broader cultural context, the organizational culture also greatly impacts the adoption of M&E practices. “Without an empowering [organizational] culture, in which mistakes can be made and even appreciated... organization-wide learning is unlikely to occur,” say De Coninck et al (2008:79). Vocal support from senior management is needed in order to overcome staff’s aversions to criticism and fears of “revealing errors or inadequacies” (Seasons, 2003:436). Staff must be instructed on the purposes of M&E and the use of the information acquired. Organizations must also face the challenge of retaining the legitimacy of informal learning whilst promoting the use of structured, formal learning. Even organizations that embrace the use of M&E, however, regularly treat it as “a necessary but somewhat marginal activity” (Conlin and Stirrat, 2008:203). So, there is great work to be done within the evaluation field to promote smoother organizational shift and culture change, towards becoming learning organizations in which M&E is more of a lens or an outlook, an integral part of day-to-day activities and attitudes that promote reflection and innovation.

(How) is learning from practice put to use?

As noted, one of the primary reasons to evaluate is to produce instructive learning that will inform future decision making. That means not only developing knowledge, but ensuring that it is applied within the organization and sometimes beyond. This crucial step, however, is often not put into action. Writing about urban planning programs across Europe and North America, for example, Oliveira and Pinho say that “only in some few cases are evaluation results directly used to influence the contents of the programs under assessment or the contents of subsequent programs”. They continue, “In most cases the influence of the evaluation results is, at most, of an indirect nature and rather slow to emerge” (2010:349). Among development organizations, De Coninck et al write that “We often find that information gathered is rarely analyzed, fed back to the grassroots and regularly used for decision making. This adds to a perception of reporting as a burden with no visible benefit, especially among busy field staff.” (2008:61).

There are many reasons why evaluation-derived information may not be later utilized. The content and presentation of evaluation reports may be less than ideal. The large quantity of data produced through some evaluations may actually be counterproductive: “We often find an overkill of information,
hindering utility and blocking decisions” (De Coninck et al, 2008:48). Theories associated with “attention economics” explain that information users have a limited supply of attention, and with an increasing amount of information inputs it becomes increasingly difficult to filter for and assess relevant information (Simon, 1996:143–144). If the information cannot be analyzed given the resources and capacities at hand, then it is not very useful information. Some scholars have critiqued standard evaluation reports as a “failure in communications”, with “unexciting format and dismal standards of presentation” (Conlin and Stirrat, 2008:203). Still others have pointed to issues with the timeliness of evaluation reports: “Getting real-world benefits out of evaluation requires that those who are making decisions receive evaluation results in a timely manner and in a form that is... understandable” (Center for Global Development, 2012:1). As such, evaluations should be prepared with the intended audience in mind, made to be user friendly and highly readable, and completed in a timely fashion.

However, even the most adeptly prepared evaluation reports may remain unused. Decision makers commonly distrust evaluators and the credibility of evaluation findings (Conlin and Stirrat, 2008:203), especially in places or organizations that are new to evidence-based decision making. Further, politically appointed or elected decision makers may not have a genuine interest in improving program results, and may be simply “using social programs for the purposes of getting votes or providing patronage employment” (Center for Global Development, 2012:1).

USAID intends to promote evaluation utilization, according to its new evaluation policy, by:

“designing evaluations to fill gaps in knowledge in time to inform decisions; engaging partners in evaluation planning and later in the review and use of findings; synthesizing findings from individual evaluations to glean common lessons that could be applicable in a variety of contexts; ensuring evaluation findings inform mission strategic planning and project design; tracking the use of evaluation findings in project adaptation, management, and other decisions; and sharing findings transparently with stakeholders and the public.” (USAID, 2012:17)

Many other development organizations have established similar agendas to put evaluation findings to use. In the end, it is important to remember that “evaluation is of little more than academic interest unless it feeds into policy-making and has a positive impact on the development process” (Conlin and Stirrat, 2008:203).
Prescriptive Texts on How to Evaluate Informal Settlement Upgrades

While a plethora of sources suggest methodologies for evaluating development interventions or public programs in general, relatively few specifically detail how informal settlement upgrades should be evaluated. Each of the sources I encountered comes from a development industry orientation. In addition to these sources, one would presume that local program designers and practitioners would typically draw on generic development evaluation materials as well as project management literature in designing and implementing M&E practices for settlement upgrades. These locally produced frameworks, however, are not well documented nor easily accessible.

Organizations involved in funding various upgrading projects or managing coherent upgrading programs may specify how evaluation is to be carried out on the projects within their realm. For example, dating back to 1986, there is a World Bank technical paper outlining M&E practices for program managers and researchers working in urban development programs, including settlement upgrading (Bamberger, 1986). Although the original document could not be accessed, this excerpt from the introduction provides an overview of its contents and the academic fields it draws on:

“This Handbook provides guidance on all stages of the design and implementation of a monitoring and evaluation system and presents the main options with respect to scope, key research issues and organization. Monitoring and evaluation systems are described which can be applied to both individual projects and to integrated multi-component urban development programs...The unique contribution of the Handbook is to show how approaches taken from the fields of sociology, economics, anthropology, and accountancy can be combined in an integrated monitoring and evaluation strategy” (Bamberger, 1986:iii).

Over a decade later, Shlomo Angel (1999) developed a framework of specific indicators that may be used in monitoring, managing and assessing upgrading programs. It is important to point out that this work refers specifically to programs, not the individual projects that comprise them. One of the explicit intentions of this framework was to establish global and regional norms for M&E that would allow for comparison between programs. The framework comes across as a fairly technical tool for the management of upgrading programs that heavily focus on housing provision. There is very little mention of other physical infrastructure, and no mention of social infrastructure or programming. Angel offers “ten typical indicators” for monitoring program progress that largely refer to program costs, timeline, a quantitative measure of program reach (coverage structure and potential), and levels of decentralization.
and privatization. These last two indicators clearly show how evaluation frameworks may include criteria that serve “donors”, as many banks and IDAs promote agendas of decentralization and privatization. On the other hand, not a single program progress indicator refers to process and/or the meaningful participation of the population. Angel goes on to list “ten typical indicators” that measure housing conditions: land price-to-income ratio, house value-to-income ratio, rent-to-income ratio, owner occupancy, credit-to-value ratio, residential economic activity, floor area per person, construction quality index (including service hookups, infrastructure quality index, residential mobility (households that moved in the past year). Once again, the proposed indicators are highly focused on finances, and provide no indication of resident satisfaction.

Heavily citing Angel’s 1999 work, Imparato and Ruster outline how a program monitoring and evaluation system may be established for settlement upgrading, by describing objectives, potential indicators, and the sequence of activities involved (2003:200-207). Their book, also published by the World Bank, is oriented towards supporting the work of bank and development agency actors. It distinguishes between the use of indicators for assessing effectiveness, efficiency, and pertinence, and the use of indicators for “reality monitoring”. So-called “reality monitoring” should be focused on the conditions of poverty, social exclusion, and social capital. Several indicators for poverty are listed; none for measuring social exclusion or social capital. Ironically, given that the title of the book is *Slum Upgrading and Participation*, the authors relegate a partial discussion of public participation in monitoring and evaluation practices to a textbox near the end of the section (207).

More recently, in 2006 a pair of Harvard researchers prepared a significantly more detailed framework for assessing the impact of upgrading projects. Once again published by the World Bank, the document underlines the importance of *impact evaluation* and reviews several generic methodologies. The authors argue that “while all programs should be subject to process evaluations, not all programs should be subject to impact evaluations” (World Bank, 2006:1). Instead, they propose an increase in randomized evaluations. The document includes an overview of data collection strategies and complexities commonly encountered in the context of urban upgrading. The authors include explicit recommendation that resident surveys be conducted, including open ended questions about changes in the community. In terms of what should be measured, the authors outline some common areas: completion rates (essentially conformance evaluation), equity of impact, socio-economic impact, community-level outcomes, real estate market effects, and cost recovery. They also list several areas of potential impact that are not as commonly measured, but may be relevant and informative: fertility, residential
segregation, formal sector integration, political enfranchisement, local governance, intra-household bargaining and gender issues, mental health, informal taxes, time use, and credit market demand and access. What results is a very thorough treatment of issues to be considered when designing and conducting impact evaluations of settlement upgrading.

So, the prescriptive texts around the evaluation of upgrading have certainly evolved over time. Reflecting changes within upgrading practices, there has been an evolution towards evaluations that focus on more than just physical outcomes. Social and quality of life impacts have become more prominent and more emphasis has been placed on understanding an array of changes that may be associated with upgrades. The extent to which they are implemented, however, is unclear.

Further, as noted before, these prescriptive texts come from a development industry orientation. Government entities and local practitioners may have their own (less easily accessible) frameworks for evaluating settlement upgrading. The Brazilian example will be addressed in Chapter 5: Monitoring and Evaluation in Brazil.
Chapter 4: Informal Settlements and Brazil’s Housing and Urban Development Sector

Brazil is the most populous country in Latin America, home to almost 200 million residents. It also has one of the most urban populations in the world, with about 84% of residents living in cities (IBGE, 2010:1). Brazil is the world’s eighth largest economy, a member of the BRIC countries of major emerging economies that are primed to drive growth in the twenty first century. Yet, 21% of the population still live in poverty (CIA, 2009:1). It’s reported that thirteen percent of the urban population lack proper sanitation infrastructure (CIA, 2013:1).

In terms of the population living in informal settlements, there is enormous discrepancy between sources: the UN Statistics Division reports that 45 million people (or 24% of the population) live in a “slum” (which includes tenements in its definition) (2012:1), while the Brazilian census reports that only 6% of the population live in a “subnormal agglomeration” (which does not include tenements, but is otherwise almost synonymous with the UN’s “slum” definition) (IBGE, 2011:1).

Brazil is renowned for its inequality, dating back to colonial times, with wealth heavily concentrated in the upper classes. In fact, until the 1990s, “the government actively promoted income-concentrating policies” (Magalhães and di Villarosa, 2012: XV). The top decile of the population currently earns 42% of GDP, while the bottom decile earns .8% (CIA, 2009:1). Wealth is also geographically concentrated in the cities of the southeast; the metropolises of São Paolo, Rio de Janeiro and Belo Horizonte have served as enclaves for the rich, with historic connections to the coffee barons of the nineteenth century (Huchzermeyer, 2002:84).

In the context of this disparity and inequality, the Brazilian city serves as a crucible of intense class friction, with poverty and wealth sharply juxtaposed in a complex and fragmented landscape of inclusion and exclusion. There are signs of hope, however, with the implementation of more progressive income policies, significant improvements in the Gini index (of income inequality) over the last fifteen years (Neri, 2009:231) and major efforts to improve urban physical and social inclusion.

In this chapter, I introduce the Brazilian housing sector, in the context of the major political, economic, and demographic transitions over the last half century. I trace Brazil’s process of urbanization, beginning with the post-war industrialization boom. I go on to outline the confluence of conditions that fostered
the growth of informal settlements. Finally, I present a chronology of national housing and urban development policy. This is intended to provide a historical understanding of the policy and institutional context from which informal settlement upgrading emerged, as well as the current framework in which upgrading now exists.

**Urban Demographic Shift**

Changing political and economic dynamics over the last century incited major demographic shifts in Brazil. A number of factors made rural life increasingly difficult, while urban opportunities expanded and became increasingly appealing. As with most countries, both public and private investment and associated employment opportunities are concentrated in Brazil’s cities. In the 1950s, rapid post-war industrialization brought on the first wave of rural-to-urban migration and “an intensive… urbanization process” ensued (Magalhães and di Villarosa, 2012: XV). Throughout the mid-century, the country experienced waves of inflation and fluctuating commodity prices. Technological advances also replaced rural laborers, leaving a surplus of unemployed and typically impoverished rural residents. This destabilization of the rural economy, along with other factors, made rural existence a more tenuous endeavor and prompted migration to urban centers.

Twentieth century Brazil was defined by this population flow: the push away from rural livelihoods and the pull towards urban ones. In 1950, only 36% of the population lived in cities. Just sixty years later, between 84 and 87% of the population is urban (IBGE, 2010; Population Division, 2010) (see Figure 7).
Conditions for Informal Settlement Growth

In this section, I highlight the requisite conditions for informal settlement growth, building on the concepts presented in Chapter 2. Its purpose is to prime the reader for better understanding the dynamics that play out in the housing and urban development sectors, presented in the following section.

Though grossly simplified, the fundamental dynamic driving the proliferation of informal settlements is a housing supply and demand mismatch. There are many factors that contribute to this mismatch. While urban demographic shift is certainly a root factor in informal settlement growth, a number of other factors also heavily contribute: macroeconomic conditions, income policies, market and non-market elements of the housing system, access to credit, etc. Local urban development variables, such as “the laissez faire attitude of local authorities towards informal settlements and the favoring of wealthy neighborhoods in the spatial allocation of public investment, complicity with the delinquent practices of

High housing demand derives from increasing urban populations, the majority of whom, in this case, have low incomes and thus low housing budgets. Housing supply, on the other hand, has lagged behind demand, particularly for the low income populations. Essentially, in cities with highly coveted land, inflated land values, and sometimes restrictive development policies, low income populations do not establish effective market demand that would incentivize formal residential development. To make matters worse, Huchzermeyer (2004) points out that Brazil’s urban migration coincided with changes to rental tenancy laws that rendered inner city tenements less profitable. The production of new private tenements thus declined and many existing tenement owners looked for more profitable ventures, including sale of the property for redevelopment (Huchzermeyer, 2004:95). This further decreased the low-income housing supply.

In such situations, governments may choose to intervene with investments in low income housing, either financing or facilitating housing through a spectrum of public to private arrangements. Occasionally, non-profits or other third sector actors are capable of providing such investments, although these are typically isolated, not broad reaching, initiatives.

Thus, in the absence of concerted low income housing supply programs, serious formal housing deficits may result. Under these conditions, low income residents are forced to pursue informal housing strategies, such as high-density tenements, squatting and informal settlements. In Brazil’s case, at the turn of the millennium, large cities were home to informal settlement populations that made up to 46% of the total city population (see Figure 8).
When urban demographic shift is analyzed alongside the history of national and local housing policies and programs presented in the following section, we are able to see the confluence of factors that lead to the proliferation of informal settlements and the present state of Brazil’s housing geography. What follows is an admittedly simplified chronological account of low income housing dynamics in twentieth and twenty-first century Brazil.

**The Evolution of Housing and Urban Development Policy**

This section aims to depict the evolution of Brazil’s low-income housing sector in the context of major political and economic shifts. As will be evident, housing programs failed to reach the neediest population for many decades (Bueno, 2000:30). The government provided minimal funding and support to respond to the needs of burgeoning urban populations (Bolson Noal and Janczura, 2011:162). Certain urban policies even exacerbated the dearth of inexpensive housing (Huchzermeyer, 2004:95). Informal settlements became a primary housing solution for the low-income population. The prevailing
government response to informal settlements evolved over time: first, essentially ignoring the existence of informal settlements, then targeting them for removal, and eventually recognizing that upgrading efforts are the preferred alternative. Over the decades, there has been a gradual emergence of housing programs that offer home financing and construction that better serve the poor, not the middle and upper classes (e.g. the Minha Casa, Minha Vida – My House, My Life program).

**The Early Years: 1900-1988**

From the start of the 1900s, informal settlements were seen as “provisional and illegal solutions” and were barely addressed through official policy (Magalhães and di Villarosa, 2012: XV). Policymakers and others simply believed that they were a temporary fixture in the urban landscape that would organically disappear over time. Reflecting a tone of complacency, “favelas were tolerated, especially when located on the outer fringes of the cities, and became the main solutions to the country’s social housing problems” (Ministério das Cidades and Aliança de Cidades, 2010:7).

This tolerance, however, was short lived in many urban areas. Although Brazilian cities were mostly unplanned into the 1960s and beyond, the 1930s saw early attempts at land use planning, and “in Rio de Janeiro, the application of land-use zoning as a preventative measure against favelas” (Huchzermeyer, 2004:94). By the following decade, efforts to eradicate informal settlements became commonplace (Magalhães and di Villarosa, 2012: XV). In Rio de Janeiro, which hosts some of the oldest and most populous informal settlements, there are accounts of “constant police intervention aimed at destroying the rudimentary houses built by the poor” through the mid-twentieth century (Huchzermeyer, 2004:93). Bolson Noal and Janczura explain that urban policy was essentially “a policy of control and exclusion... rarely offering viable and comprehensive alternatives for the diverse economic classes of the population” (2011:162).

While clearance efforts intensified through this era, some “palliative and piecemeal methods” of improving settlements were also pursued (Ministério das Cidades and Aliança de Cidades, 2010:7). In the 1950s, health concerns in some cities instigated sanitation improvements in select areas. Fears of a “communist threat” also incited joint Church-Government action to improve basic services in 12 favelas (Bolson Noal and Janczura, 2011:162). In fact, the Catholic Church played a significant role in “organizing communities in the unserviced subdivisions and favelas on the urban peripheries,” helping to form workers cooperatives and community-based social services between the 1920s and 1970s (Huchzermeyer, 2004:91).
In 1964, a coup d’état led by the Armed Forces brought an authoritarian military regime into power. As part of a strategy to stimulate the economy and legitimize the new military government, the new administration created the National Housing Bank (BNH) and System of Housing Finance (SFH) to support home financing and ownership, primarily through loan programs (Cymbalista and Moreira, 2006:34; Bolson Noal and Janczura, 2011:162). The BNH was funded through compulsory taxes on workers’ incomes, however support was disproportionately allocated to the middle and upper classes, in what Ribeiro and Azevedo call “reverse redistribution” (in Cymbalista and Moreira, 2006:35). The BNH’s loan programs simply were not designed to adequately meet the needs and realities of the poor, who experience employment insecurity and low pay, among other disadvantages and conditions (e.g. inflation) that can contribute to loan defaulting (Bueno, 2000:30). In fact, during the 1960s, income inequality (as measured by the Gini index) rose sharply (Neri, 2009:222). Even though 40% of loans were initially granted to low income families at the start of the program in 1969, only 12% of the loans were granted to this income class in 1974 (Bueno, 2000:29). Critics of the programs also cited unrealistic business plans, mismanagement, lack of transparency, and increased segregation and social exclusion as outcomes (ibid).

For many years, the State was “merely a spectator” of the explosive demographic shifts taking place throughout the country (Bolson Noal and Janczura, 2011:158). At the federal and state levels, “with rare exceptions, there was practically no housing policy, and little was done for the benefit of the *favelados* (informal settlement residents)” (ibid:162). Self-built peripheral settlements continued to emerge and expand: “The unattended housing need in Brazil led to further unplanned, tolerated and officially ignored expansion of the urban periphery” (Huchzermeyer, 2004:98). In the absence of a policy on informal settlement development from higher levels of government during this era, a number of locally-based interventions took place. Some involved settlement clearance and relocation, others involved some form of upgrading, though usually linked to clientelistic relationships (explicitly in exchange for votes).

In terms of direct intervention in informal settlement, this period is mostly associated with a continuation of removals of well-located settlements (on coveted real estate) and relocation to planned peripheral settlements, some of which were intended to be ‘temporary’ living situations. Although not enshrined as official policies, these removal efforts took place in a variety of cities across the country (Bueno, 2000:28). The peripheral settlements for relocated families, including the (in)famous Cidade de Deus on the edge of Rio de Janeiro, were critiqued for their lack of public transit and inadequate
education and health facilities (Bolson Noal and Janczura, 2011:162). Unsurprisingly, this resulted in further segregation and socio-economic exclusion.

Despite these trends of removal and relocation, some positive change in understanding and action around informal settlements took place during the 1960s. New dictates within the Catholic Church initiated increased advocacy, community organizing and conscientization around human rights and informal settlement issues. Also, studies that present informal settlements as “a legitimate form of housing provision” began to emerge (Bueno, 2000:28). This era saw some early cases of settlement upgrading due to public mobilization against forced removal (e.g. favela Brás de Pina, in Rio de Janeiro) (Magalhães and di Villarosa, 2012: XV).

By this time, the national economy was ramping up; agricultural exports doubled and the industrial sector reached almost 10% growth per year during the 1960s (Brainard and Martinez-Diaz, 2009:2). However, this apparent growth depended on mounting external debt from frequent, large IMF loans (Rohter, 2010:139), as well as growing income inequality (Neri, 2009:257).

In 1973, this “economic miracle” abruptly ended with the arrival of the global oil shock. High levels of inflation, economic recession, high unemployment, and general instability ensued. This inevitably resulted in widespread loan defaulting, which affected the solvency of the System of Housing Finance (Bolson Noal and Janczura, 2011:163).

While Rio de Janeiro had a long history of informal settlement, São Paulo did not see major expansion of informal settlements until the 1960s and ‘70s. The confluence of several economic, demographic, and political factors greatly exacerbated the housing deficit and led to informal settlement growth. During the 1970s, land values sharply increased by 160% (per square meter), while the real minimum wage fell 24% (Fialho, nd:15). A “clear process of impoverishment” anchored in an untenably low minimum wage certainly contributed to high rates of informal settlement growth (Fialho, nd:15).

During this era, the federal government established the first national-level informal settlement upgrading program (Magalhães and di Villarosa, 2012: XVI). Though fairly inconsequential in terms of the number of households benefitted, “its implementation signaled a radical change in the official posture towards favelas in that it accepted the possibility of legally regularizing an invasion of urban land” (Bueno, 2000:31).
Over these two decades of military rule, direct interventions in informal settlements evolved in marked ways: “The beginning of the period was characterized by an authoritarian attitude and removals by force; Later years of the military rule were characterized by a softer approach of acceptance and upgrading,” writes Wimpey (2004:34). This transition was also experienced in other countries, as “repressive intervention measures” gave way to the “gradual (and often ambiguous) recognition of the urban right of the previously excluded population” (ibid).

The 1980s began with a major debt crisis and economic slowdown that led into what economists call “the lost decade” (Brainard and Martinez-Diaz, 2009:2). No longer solvent, the National Housing Bank was dismantled and the remaining funds were transferred to another bank, the Caixa Econômica Federal (Caixa), which was, at this point in time, entirely inexperienced with managing housing programs (Bolson Noal and Janczura, 2011:164). The economic slowdown also meant that many households faced increasing difficulty in obtaining or self-constructing housing.

Housing and issues of urban reform thus became heavily politicized, as social and political movements, including the Workers Party – PT, solidified. The PT promoted “autonomous grassroots control” (Wimpey, 2004:31) and “direct participation in the definition of intervention programs” (Huchzermeyer, 2004:110). Over time, the PT and its principles would gain national prominence and revolutionize Brazil’s urban policy and practice.

With a failure to effectively address informal settlements at the federal level, some municipalities were pressured to take action “in response to the pressing housing shortage, health and related environmental problems or the demands of real estate capital” (Bueno, 2000:28). Beginning in 1983, the city of Recife started to experiment with a land use designation for existing informal settlements, labeled “zones of special social interest” (ZEIS) (Cymbalista and Moreira, 2006:40). See Figure 9, the ZEIS zoning map from the City of Salvador. This signified that the settlements were officially recognized and put on track for tenure regularization and upgrade planning. The ZEIS tool was further developed in the city of Diadema in the early 90s, as a strategy for a zoning and reserving unoccupied land for future “social interest housing” (ibid). Wimpey points out that ZEIS helped to support the concept of upgrading as an incremental process rather than an activity or series of activities (2004:15). This paved the way for more strategic and comprehensive upgrading that addresses multiple issues and conditions over time.
Figure 9: Basic Upgrading Process

1. Debates (Architects, Engineers, and Social workers from Housing Municipal Secretariat) with Inhabitants from favela (interferences on infrastructure during process of urbanization).

2. Surveying, geotechnical investigations, and social register.

3. Guidelines of urbanization with resident families.

4. Cleaning and hygiene education.

5. Debate of Urbanization Project.

6. Project elaboration by technicians.

7. Project approval process by resident families.

8. Infrastructure works.


Illustration: Marco Antonio Fialho
1993
**Democratization and the New Constitution**

Political and social change was in the air as Latin America was swept by a wave of democratization in the 1980s. In 1985, Brazil followed suit; the era of military dictatorship came to a close and the country peacefully transitioned to democracy. With this regime change, long-brewing visionary ideologies were debated on the national stage and became the platform for the New Republic. Urban governance policies were overhauled and the legal foundation of housing rights was established: “From the outset, the new government realized that it was vital to construct a new institutional framework for the urban and housing sector” (Ministério das Cidades and Aliança de Cidades, 2010:8). President José Sarney formed a Special Secretariat of Community Action to coordinate a variety of programs intended to benefit the low-income population: infrastructure and regularization of informal settlements, social housing construction, and increased service provision (Bueno, 2000:32). While efficacy was minimal, the new suite of programs established a much needed dialogue and recognition of the potential roles of informal settlement communities, community organizations, and municipalities (ibid).

In 1988, the New Democratic Constitution was passed, enshrining a spectrum of progressive changes into law. A transformative shift of powers, in a massive decentralization process, thus began; many federal government powers and functions were delegated to state and municipal agencies. Decision making and planning became more democratized, “with support from both the neoliberal sector (seeking a leaner central state) and the left (seeking space for political expression at municipal level)” (Huchzermeyer, 2002:93). As such, policy making regarding informal settlements largely took place at the subnational level, with substantial requirements for citizen participation.

The current Constitution includes an entire chapter on urban policy with three fundamental understandings: the social function of property and of the city; the democratic management of the city; and the right to the city (Cymbalista and Moreira, 2006:39).

The ‘social function’ of land within the city can be understood as “the supremacy of the public right over the private right in the regulation of the urban order” (Wimpey, 2004:14). This essentially aims to curtail speculation and private land banking, and improve the availability and affordability of land. Interestingly, this concept was first introduced as a Constitutional amendment in 1934, but was discarded under subsequent military rulers (ibid).
Political governance is largely decentralized, with local councils put in charge of urban development (ibid). Huchzermeyer notes that “a strongly decentralized framework allows space for socially oriented, progressive and democratic practice at the municipal level” (2004:105).

Squatter rights are also declared in the Constitution, which “establishes the parameters of regularization” for squatting on private land (up to 250 sq. meters) when uncontested for a period of more than five years (Wimpey, 2004:14).

The Constitution also obliges cities of 20,000 residents or more to prepare master plans which define the use and development of city space, and enable land to be dedicated to social uses. Popular participation is required so that plans reflect community desires. The extent to which this is actually implemented varies widely between municipalities (dos Santos Junior and Todtmann Montandon, 2011).

The Constitution thus puts forth a framework of very progressive and ambitious declarations, disturbing market supremacy and destabilizing such long-held socio-political bastions as the legal foundation of land ownership. However, it does not establish the political, institutional and financial backing to allow all of these objectives to be realized. In terms of the housing sector, for example, the legal framework exists, but it is not sufficient to stimulate housing programs that meaningfully benefit the poor. Institutional confusion, as well as funding shortages brought on by a heightened economic crisis, left the housing sector to flounder.

In the early years of the new democracy (mid 1980s to 1990s), federal housing responsibilities were shuffled between departments, with “constant changes in the institutional structure of housing and sanitation policy” (Ministério, 2013:1). “Government departments and secretariats were created and dissolved, social housing programs are assembled and disassembled” during the succession of three presidential administrations (Bueno, 2000:33). Federal housing policies, resources, and actions were largely inconsistent or absent, although a handful of new housing programs directed towards low-income families emerged. Results, however, were mixed, with several hundred thousand housing units constructed, but also came reports of clientelism and serious resource mismanagement (Bolson Noal and Janczura, 2011:165).

In this vacuum of active and effective leadership at the federal level, progressive municipalities continued to lead the way in innovating solutions for improving governance, housing and urban issues. The Workers’ Party gave rise to mayoral leadership in 36 cities (Sader and Silverstein, 1991: 89) and
promoted their democratic, pro-poor informal settlement policies. In concert with the decentralization process, the municipal share of tax revenue also rose significantly (see Figure 10), allowing more possibility for increased social spending at the local level.

**Figure 10: Sample ZEIS Map, Salvador**

Municipal innovations include:

Beginning in 1989 participatory budgeting was piloted in Belo Horizonte. In this process, a certain portion of the municipal budget was allocated to the priorities set through community decision-making sessions. The process led to increased municipal support for housing issues (Cymbalista and Moreira, 2006:41). Participatory budgeting would become the cornerstone of the PT’s urban governance process (Huchzermeyer, 2004:129).
In 1990, the city of Porto Alegre piloted a system for land regularization which legitimized informal settlements and allowed occupants to remain in centrally located areas (Cymbalista and Moreira, 2006:41).

Some municipalities developed systems for objectively assessing neighborhood needs and prioritizing projects in an effort to minimize clientilistic state-society relations. One such example, the HABISP database, will be discussed in more detail in the following chapter.

Many other cities have since acquired and implemented these innovative tools and techniques, with some level of variation. Throughout the 1990s, settlement upgrading initiatives accumulate and evolve: “Specific technical solutions begin to emerge, although in general they remain isolated experiences, limited to a few municipalities” (Magalhães and di Villarosa, 2012: XVI-II). Figure 11 illustrates the basic process that was developed for an early iteration of settlement upgrading. Municipalities still generally lacked the financial resources to fully roll out their housing visions and eliminate the housing deficit. So, despite noble efforts, the low income housing deficit remained at crisis levels (Bolson Noal and Janczura, 2011:164). Nonetheless, a “slow process of public policy institutionalization” was underway (Denaldi, 2009 in Magalhães and di Villarosa, 2012: XVI-II).

**Figure 11: Increasing Municipal Tax Revenue**

<table>
<thead>
<tr>
<th>Year</th>
<th>Federal</th>
<th>State</th>
<th>Municipal</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>59.44</td>
<td>34.75</td>
<td>5.81</td>
<td>100.00</td>
</tr>
<tr>
<td>1980</td>
<td>68.16</td>
<td>23.27</td>
<td>8.57</td>
<td>100.00</td>
</tr>
<tr>
<td>1988</td>
<td>60.09</td>
<td>26.61</td>
<td>13.30</td>
<td>100.00</td>
</tr>
<tr>
<td>2006</td>
<td>57.20</td>
<td>25.38</td>
<td>17.42</td>
<td>100.00</td>
</tr>
<tr>
<td>2010</td>
<td>57.10</td>
<td>24.60</td>
<td>18.30</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Source: Adapted from Afonso (2011)

In 1992, for the first time a federal program (Habitar Brasil BID - HBB), supported with external funding from the Inter-American Development Bank (IDB), provided some support for states and municipalities to pilot and improve upgrading projects, as well as construct new housing (Bueno, 2000:34). The program promoted the use of mutirão, or communal work parties in which the beneficiary community provides skills and labor to execute the project (Bolson Noal and Janczura, 2011:167). The use of mutirão helped keep costs down and some advocates said that it promoted greater community ownership of the work products. Critics, though, claimed that mutirão had been overused, taking
advantage of a free labor force and robbing an impoverished population of what little free time they have (Vale, 2011:3).

Academic, professional and political discourse around inequality and informal settlements also shifted during this period. Terms such as “social inclusion”, “favela integration”, and “decent housing” (*moradia digna*) became more commonplace. The City of Rio de Janeiro’s 1992 Master Plan expressly addressed the integration of informal settlements with the city as a whole (de Oliveira Lopes, 2010:5).

The country’s politics and economy were in flux, though. Deep-reaching institutional reorganization continued. National finances were embroiled in “hyperinflation, cuts in incentives and subsidies in areas of social interest, an increase in taxes, growing internal debt and extreme external debt” (Bolson Noal and Janczura, 2011:163). A president was impeached, the national currency changed, and the country liberalized its trade policies (Neri, 2009:224).

Beginning with the Cardoso presidential administration in 1995, the economy stabilized and entered a period of continuous economic growth (see Figure 12). With the growing role of international lenders, and perhaps other factors, national housing policy adopted more neoliberal ideology: the private sector was invited to play an increasingly central role in affordable housing provision, as the federal government excused itself from much of its previous housing responsibility. It might be considered something of a paradox that international lenders (The World Bank, The IDB) both financed informal settlement upgrades, yet championed the adoption of neoliberal policies (which many claim exacerbate the growth of informal settlements), and imposed restrictions on transfers from a federal fund to municipal housing budgets (Cardoso and Queiroz Ribeiro, 2002:16).
The city of Rio de Janeiro launched its groundbreaking Favela-Bairro (Favela-Neighborhood) Program in 1995, with IDB support. It demonstrated unprecedented institutional and political commitment by “channeling nearly half the city’s budget to its Housing Department and giving the department a central political management role” (Magalhães and di Villarosa, 2012:5). The program achieved a moderate level of community consultation, though the degree of direct community decision making seems to have varied substantially between the individual projects (Magalhães and di Villarosa, 2012:50). However, significant, highly visible, on-the-ground changes were seen in sites across the city. The program marked a fundamental shift in the scale of political and financial commitment towards upgrading.

The Cardoso administration piloted a new demand-side program (i.e., A Carta de Crédito) that, instead of promoting increased affordable housing supply, offered subsidies to end-users to procure the housing that best fit their needs. A central stipulation of the program was that the units purchased must be part of the formal housing market. But, as very few affordable units exist in the legal market, the program stalled and its fatal flaw of logic became glaringly apparent (Pasternak, 2013:1). Bueno explains that while a national housing fund existed, programs were developed and resources were budgeted, programs were not fully implemented, in a “striking mismatch between the goals of each program and its actual achievements” (2000:34).

Not only were programs logically flawed, but “a centralized bureaucratic system... [also] impeded the utilization of the national housing fund... In 1995 and 1996, only one-fifth of the available national housing budget was spent” says Huchzermeier (2004:126), referencing Saule Jr (1998). Housing
construction drastically declined and the housing deficit worsened, “reaching 7 million families living without decent housing” (Bolson Noal and Janczura, 2011:166). There were reports of “giant belts of poverty and unbridled increases of marginalization and crime” (Bolson Noal and Janczura, 2011:166).

In some cities, informal settlements were growing at higher rates than the urban population as a whole (sometimes up to twice or three times the city’s rate). “Occupied areas are becoming denser, and new settlements are being formed daily, resulting in the encroachment of environmentally sensitive areas, protected water reservoirs, public land, and other hazardous areas”, wrote Wimpey (2004:32). In Rio de Janeiro’s settlements, Janice Perlman wrote that increased densities were achieved through dangerous “verticalization” of houses, as residents sell their rooftop real estate and construction sprouts upwards (2010:20).

A functional national housing system (preferably functioning in a decentralized and democratic fashion) was desperately needed (Huchzermeyer, 2002:93)

**Housing Policy in the New Millennium**

Brazilian housing policy underwent great legal and institutional strengthening in the twenty-first century. In 2001, the City Statute was approved: “a unique ground-breaking [federal law] conceived by the widespread urban reform movement in Brazil” (Fortes and Cobbett in Santos Carvalho and Rossbach, 2010:3). It was intended to provide nation-wide, coherent direction to guide and legally support municipalities through reforms of their urban management. The Statute consolidated previous legislation plus enabling instruments on “a series of key themes related to democratic government, urban justice and environmental equilibrium in cities” (Maricato, 2010:5). Essentially, it “highlight[ed] the gravity of the urban question” (ibid) and provided the means to operationalize the bold declarations enumerated in the Constitution. The Statute addressed the following: “guidelines and precepts concerned with urban planning and plans; urban management; state, fiscal and legal regulation (particularly referring to landed property and real estate); tenure regularization of informal properties; and social participation in the elaboration of plans, budgets, complementary laws and urban management, etc.” (ibid). But the City Statute, like the Constitution before it, has only been selectively applied and adhered to, with local councils and courts continuing to make decisions in which private land rights supersede the social use (ibid). In fact, this is a common issue in Brazil and there’s even a particular phrase for laws or rules that don’t get followed: “*Uma lei que não pegou*”/“A law that didn’t stick”.
In 2003, Luiz Inácio Lula da Silva (“Lula”) was elected as the nation’s first PT president. His administration was decidedly more socially progressive than any before him, and expressed great concern around the mounting housing deficit (Bolson Noal and Janczura, 2011:166). Under Lula’s leadership, anti-inflation plans were instated and new income policies were piloted, resulting in a stronger national economy and a reduction in income inequality (Neri, 2009:222).

The federal government finally formed a National Housing System. The Ministry of Cities was established, under which functions a National Housing Secretariat. Housing Councils (comprised of an array of stakeholders) and Funds for Social Housing were also set up at the national, state, and municipal levels (Cymbalista and Moreira, 2006:35,44).

The creation of the Ministry of Cities revolutionized the way that urban issues are tackled. It provides the institutional basis for conducting holistic, integrated, inter-sectoral projects and programs, as it houses multiple departments/secretariats that work in the urban sphere (transport and mobility, sanitation, urban programs, and housing).

**Figure 13: Ministry of Cities Organizational Chart**
On their own website, the Ministry states that before its establishment, “urban policy had been... strongly influenced by public banks responsible for financing housing and sanitation” (Ministério, 2013:1). However, by providing consistent and coordinated policy direction, the Ministry is intended to help “subordinate financing to the guidelines of urban development policy, seeking to avoid the errors of the past” (ibid).

The primary actors involved in implementing upgrades are still municipal and state level housing and urban development departments. They commonly (though not exclusively) do so with some federal oversight and funding, now coordinated through the Ministry of Cities and its Department of Settlement Upgrading (see Figure 13).

Under Lula’s presidency and Ministry leadership, a number of new housing initiatives were also installed. As indicated in Figure 14, settlement upgrading expenditures increased an average of 49% year-on-year (between 2003 and 2007), going up almost four-fold over a five year period (Ministério das Cidades and Aliança de Cidades, 2010:8).

**Figure 14: Annual Earmark for Upgrading Programs**
Historically, the middle class has been the major beneficiary of housing policies, even if on paper they were designed to reach low-income populations (Bolson Noal and Janczura, 2011:168). But new policies and programs seek more realistic and effective means of reaching those most in need (ibid:166). Under Lula, large scale title regularization was initiated (IPEA, 2011:2); residential buildings were purchased or commissioned for social housing (Bolson Noal and Janczura, 2011:167), and; low income credit programs were formed, home financing programs were created, and taxes on construction supplies were lifted (ibid). By next year (2014), over two million homes will have been constructed using subsidized financing packages initiated during Lula’s presidency (Portal Brasil, 2012:1).

Unprecedented federal funding packages have also been made available for more than one thousand multi-sectoral informal settlement projects, amounting to USD $15 billion in federal investment, that when completed, will benefit approximately 2.4 million families (Quinderé, 2013:1). Housing, transportation, energy, roadways, sanitation, drainage, lighting, environmental risk management, public infrastructure, social services, etc. can thus be comprehensively addressed in strategically integrated upgrading projects, even in large and complex settlements. The program also fosters capacity development and expertise at the federal and local levels, though the Brazilian Institute of Applied Economics Research (IPEA) is cited as reporting that “Overall, the first stage of the program was successful. However, projects’ delivery and spending execution were initially held back by a lack of capacity in project planning and management, difficulties in obtaining environmental licenses, and in a few cases, procedural irregularities” (OECD, 2011:105-6).

As can be imagined, these major initiatives have not rolled out without a good deal of debate and criticism. The issues raised range from questions of government power distribution when the Feds hold the purse strings, to claims that the construction and development industry has overly capitalized on these policies, to problems of urban form and municipal utilities extension costs that result from constructing peripheral tract housing, to complaints around the quality of interventions and the mounting maintenance costs, to simply stating that not enough is being done.

Despite these major housing programs, the number of informal settlements and number of households living in informal settlements continue to increase in almost every region (see Figures 15 and 16).
Brazil's Southeast has shown a continuous medium-to-high growth of households in informal settlements since at least 1980 (no accurate date exists before then), and now hosts nearly half of the country’s informal settlement households (see Figure 16). In the last ten years, the Northeast has seen the greatest increase in rate of growth in the number of households in informal settlements, as this region has seen great improvements in economic opportunities over the last decade. Some of the rate of increase (among all regions) can be attributed to natural growth. It is also likely that some of the increase in informal settlements and informal settlement households may be attributed to improved methods of settlement identification in the 2010 Census, though I have not been able to verify the extent to which this is the case. The rest may be attributed to the continuing process of rural-to-urban migration (refer back to Figure 4), inter-city migration in which households relocate into informal settlements, some level of immigration, and perhaps some movement from formal housing to informal housing within the same city. Much remains to be understood in terms of demographic specifics.
**Future Challenges**

In concluding this chapter, it is important to remember how far the housing and urban development sector has advanced. “Indeed, it is difficult to, in a short time, reverse a situation that has lasted more than a century; For decades, we saw housing policies that were sometimes indifferent, sometimes exclusionary, and not broad reaching,” note Bolson Noal and Janczura (2011:169).
In very concrete terms, the Ministry of Cities and the Cities Alliance remind us of the long list of serious challenges that have been progressively overcome in upgrading alone, through several decades of trial and error:

“- the need to mobilize resources on a scale compatible with the overwhelming demand;

- the problems involved in ensuring the continuity of programs whose implementation schedules generally extended beyond the mandates of the authorities originally responsible for initiating them;

- the influence of pressure groups and political interests on resource allocations;

- the problematic liaison between different governmental bodies and institutions faced by complex on-the-ground interventions;

- the difficulties encountered with the public utility providers of light, water and sewage facilities locked into rigid project design and intervention straitjackets;

- the need to train professionals, especially in urbanism and project design, and to better equip them to deal with the unorthodox spaces occupied by slums;

- the maintenance of the improvements already made;

- the need to retain the original occupiers in the settlements which benefited from the improvement programs; and, finally,

- the pressing need for land and property tenure regularization in the newly upgraded areas”

(Ministério das Cidades and Aliança de Cidades, 2010: 7-8).

Though not yet universally accomplished across the country, this list of challenges-turned-achievements highlights the fact that upgrading programs have undergone remarkable evolution over the past decades. What we see now in modern Brazil is a very healthy, public debate around urban and housing issues, which consistently pushes policymakers and practitioners towards revising and improving their programs. Public discourse on informal settlements has also radically shifted towards more acceptance, with “social inclusion” and “urban integration” becoming common phrases. We see a whole new framework of legislation and institutional structures in place that provides the foundations and
mechanisms for improving informal settlements. We also see federal leadership and massive housing budget increases that enable programs on a scale never seen before.

The future of informal settlement upgrading is bright. By learning from past and current projects and programs, upgrading techniques will continue to improve over time. As will be discussed in the following chapter, structured evaluation systems may help to accelerate this learning process, support the refinement of policies and programs, and broaden the benefits of upgrading.
Chapter 5: Monitoring and Evaluation in Brazil

Brazil has seen great advances in the evaluation of public policy over the last few decades (Nogueira, 2009:1). Government agencies have made resounding calls for improving the use of evaluation: “Considering the importance of government actions on economic growth and social development of the country, it is key to build and extensively use performance measures that express the degree of achievement of goals and objectives,” writes the Ministry of Planning, Management and Budget (2010:15). Brazilian scholars and researchers have echoed these calls, with thorough assessments of how evaluation is employed in other countries and discussion of the potential roles it could play in reforming Brazil’s public administration (dos Santos and dos Santos Cardoso, 2001). In this chapter, I describe the improvement of data availability, quality, management, and analysis in Brazil’s public sector. I offer some assessment of the current practice of M&E within the housing and urban development sector, and outline other political and professional trends that may support the continued growth and refinement of M&E as a critical element of the planning cycle for informal settlement upgrading.

Emerging “Culture of Information” in Public Administration

In mapping the trends towards increasing use of monitoring and evaluation in Brazil, it is helpful to refocus one’s attention on the fundamental role of M&E as a support system for knowledge production. It is closely associated with other forms and systems of data collection, analysis, and use. Further, I posit that the social conditions and understandings that support increased data use may also support the practice of monitoring and evaluating public sector projects and programs.

Indeed, evaluative studies have been increasingly conducted, especially on the outcomes of new federal programs. Conditional cash transfer programs, such as the Bolsa Família, Bolsa Escola, Bolsa Alimentação (see Neri, 2009), have been the subject of fairly rigorous evaluation, likely because they are contentious and high profile, with large sums of money and huge beneficiary population involved. In addition to economic-based programs, the health, education, and social work sectors have led the way in monitoring and evaluating program results (Balbim et al, 2012: 9; see also the Education Evaluation Laboratory at PUC-RIO and the National System of Basic Education Evaluation).
Urban development sectors (related to housing, sanitation, and mobility), on the other hand, have been slower to develop and advance the practice of evaluation. Some researchers attribute this partly to the policy vacuum created when the National Housing Bank dissolved in 1986 (Balbim et al, 2012: 9). As urban policies and programming went through a period of inconsistency, other sectors with more stable institutional and funding structures were better able to take advantage of the new “age of information” and advance the development of their monitoring and evaluation systems. It’s interesting to note that Brazil’s international development agency, the Brazilian Cooperation Agency (ABC) also “does not have mechanisms to evaluate its projects” (UNDP, 2011:54). So, it would seem that evaluation practices have been unevenly cultivated among Brazil’s internal and external development sectors.

Across sectors, however, there has been a vast improvement in information availability and management systems over the last few decades. The Brazilian National Household Survey was first conducted in 1976, coordinated by the Brazilian Institute of Geography and Statistics (IBGE). In 1995, IBGE decided to publicly release this data, along with its tabulations and reports (Neri, 2009: 226). While I suspect this might be overstating the case, writer Marcelo Neri claims that “Nowadays, with the release of each... report, Brazilian society debates its own achievements and drawbacks with increasing interest and knowledge” (ibid).

Starting in 1980, the Brazilian census extended its study area into subnormal agglomerations (a technical term which can essentially be equated with informal settlements; see the Terminological Considerations section for further explanation). However, only settlements with fifty dwellings or more qualify as subnormal agglomerations; informal settlements with fewer households are not counted. In 2010, the methodology for identifying settlements was improved by augmenting standard techniques with satellite imagery, which helps discover heretofore unclassified settlements (Pasternak, 2013:3). By including these populations in the census, the data quality was thus improved. Nonetheless, data are lacking for people living in slum conditions in settlements of less than 50 households. This underestimation of informal settlement populations varies by municipality: for example, “in Rio de Janeiro, where large favelas predominate, this number is small, but in São Paulo it was nearly 20% of the favela households (derived from comparing municipal population counts and census data)” (Pasternak, 2013:4).

During the 1980s and 1990s, many government agencies “modernized” their operations and transitioned to computer-based information management, with strong financial and technical support from multilateral and international agencies (UNDP, 2011:17). Several dozen state-run, private and non-
profit organizations are involved in planning, research, and statistics and produce a wide variety of social and economic statistics. A plethora of databases and analysis platforms on urban conditions have been established:

The National Cities Information System, an online clearinghouse of municipal data, with 1,300 socioeconomic indicators, plus access to progress reports on Ministry of Cities projects in housing, sanitation and transportation (http://www.brasilemcidades.gov.br)

The HABISP database and housing planning system is a fantastic source of information on tenements and informal settlements (cortiços, favelas, and loteamentos) in the City of São Paulo (Pasternak, 2013:2). It allows the City to ensure that its interventions are prioritized in a rational and objective manner, using evidence-based decision making to depoliticize upgrading processes and minimize clientelism.

The practice of social exclusion mapping emerged (Saposi, 2011:1), as city governments were provided with free geo-processing software and training (UNDP, 2011:44). A great deal of information can now be geo-referenced, allowing urban planners to perceive spatial concentrations of inequalities, among other things. In some municipalities, social workers are trained to assess and map a variety of community diagnostics: economic exclusion, service access, discrimination, and violence (Ribeirão Preto, 2010:33).

In addition to new databases and mapping capabilities, Kayano and de Lima Caldas assert that there is a "new tendency" towards the use of indicators (2002:1). The government Ministry of Planning, Management and Budget produced a guide for integrating indicator systems into program planning (2010). The UNDP reports that, "In areas such as education, health and housing, the use of indicators has become widespread, being a reference for local managers and for the dialogue between the federal Government, states and municipalities" (2011:43). UNDP goes on to qualify this statement by remarking that "this area [still] requires much improvement" (2011:43).

Indicators may be used before project planning to identify priority areas, after project implementation to help assess project impacts, or may simply be used to track development conditions, unassociated with any project in particular. It is vital to remember, though, that indicators are descriptive of current conditions; they don't clearly link actions with results. However, they may be part of an M&E system that attempts to do so. An index is a set of indicators that together provide a representation of the state of some dynamic condition. Indices are helpful because they are a curated presentation of data that is
more easily comprehensible than raw data. They may also include some layers of analysis, by specifying thresholds that indicate qualitative shifts.

Kayano and de Lima Caldas (2002) state that indicators are primarily “important management tools for public administration.” When made public, indicators also serve a vital role in “democratizing information”, allowing the public to monitor the work of their governments (Kayano and de Lima Caldas, 2002:1). Over a dozen indices have been proposed by foundations, universities, and government entities to track a wide variety of conditions in Brazil. They range in topics: economic development, education, social responsibility, social vulnerability, environment, housing needs, and living conditions (Fundap, 2006:18). Unfortunately, it’s unclear how many of these indices are actively in use. Even more dubious is the extent to which they are used as resources for evidence-based decision making or improved government accountability.

Across the board in Brazilian public administration, there are clear trends towards the increased production and management of useful data over the last two decades. Databases, indicators and indices of various forms are now in widespread use in the public sector. “The culture of information has increased substantially,” remarks Suzana Pasternak, “and we now have data that we never imagined having before” (2013:2). While this emergent “culture of information” certainly supports the increased practice of evaluation, as the following sections will indicate, combined monitoring and evaluation is not yet a widespread and embedded element of informal settlement upgrading projects.

**Monitoring and Evaluation within the Housing and Urban Development Sector**

Although more information and information management systems are available for housing and urban development professionals, the systematic practice of monitoring and evaluation lags behind. The use of monitoring and evaluation is actually quite varied within the housing and urban development sector, and even more specifically among informal settlement upgrading projects. While most upgrades are conducted by municipalities (and occasionally state agencies), there are a number of other actors involved in funding and/or managing upgrading schemes - the federal government, NGOs, international entities, consulting firms, etc. Thus, we see an uneven practice of evaluation among different projects. After more than a generation of concerted trial and error in designing and implementing upgrading programs, there still is no formal system of evaluation for upgrading projects (Pasternak, 2013:1). While a plethora of evaluations have indeed been conducted, a formal, universally-applied system of evaluation is lacking.
In this section, I present an assessment of the current state of evaluation of informal settlement upgrades in Brazil. The section highlights some of the calls for improving the use of evaluation in this area of public policy, traces the historical emergence of evaluation practice in this field, and outlines elements of its current practice. Finally, I present some evidence that the practice is undergoing development and refinement, although still not broadly used in the majority of upgrades.

**Insufficiency of Current M&E of Settlement Upgrading**

Many researchers (see authors cited below) have critiqued the current practice of M&E of upgrading in Brazil, for lacking the following: accessibility of results, methodological rigor, frequency of application, and integration of knowledge into future project- or program planning, among other complaints.

In 2001, Nabil Bonducki, professor of architecture and planning, writes that housing and sanitation programs lack universal evaluation. Evaluations are limited to analyses of certain project aspects, or to case studies (Brant de Carvalho and Nobre Barreira, 2001:12).

In a 2003 study analyzing costs of slum upgrading projects under the PROSANEAR program, author Alex Abiko notes the great difficulty he encountered in retrieving reliable cost data for the eleven case studies (Abiko, et al, 2007:1). This is somewhat surprising, considering that project costs are one of the most straightforward elements to monitor and evaluate for conformance throughout implementation.

In 2004, Fernandes and Smolka, allege poor management of funds received from international agencies “especially because there has not been a rigorous evaluation of the programmes, nor a firm demand that their targets or objectives are fully accomplished” (Wimpey, 2004:16)

In 2007, Abiko et al echo that “there have been innumerable cases of attempts to rehabilitate [informal settlements] in Brazil, but little is known in relation to the outcome of these interventions” (2007:3).

In 2010, Notarbartolo writes of the isolated nature of M&E practice: “M&E often continues to be regarded as a backroom activity which has not yet been incorporated into the mainstream management of projects and key decisionmaking. M&E is frequently confined to tracking or following-up activities or products and is rarely used for measuring results and impacts. As a result feedback on project performance tends to be minimal” (2010:172).
And even in 2012, researcher Fernanda Magalhães points out the dearth of high-quality, sufficiently evaluated case studies: “Despite the vast literature in Brazil on the upgrading of squatter settlements—including books, academic papers, monographs, and articles—a deficit persists in empirical studies. This is particularly the case with respect to lessons learned in urban development programs and favela urbanization projects, especially considering the large number of projects and programs implemented by national and multilateral agencies... Detailed and methodologically sound case studies of lessons learned are scarce” (2012: X).

Over the years, many voices have echoed the sentiment that upgrades need improved evaluation. Community groups in informal settlements were probably the first to draw critical attention to the processes and results of upgrades. Given that they are commonly the “beneficiary population” and directly experience the impacts of interventions, they have a vested interest in promoting quality control measures and keeping the government accountable to its promises. Community groups have raised serious concerns over the effects of removal and relocation programs, which disrupt existing social capital and place households in vastly different living arrangements, often in poorly serviced peripheral locations. As large social housing projects became more commonplace, there were additional concerns over the quality of construction and the built environment. There may be significant social implications for the “beneficiary population,” especially if a project is managed badly or if the resulting constructions don’t meet the community’s needs.

**External Evaluations by Academics and Research Institutions**

Scholars and research institutions have paid close attention to housing and upgrading initiatives over the last few decades and have made contributions in a number of areas. “A culture of evaluation is emerging,” says Suzana Pasternak, “though still mostly present in the universities” (2013:3). As a result of public outrage over poor quality interventions, university-based social work programs initiated studies of different methodologies for Post-Occupancy Evaluation (POE), starting in the 1980s (Pasternak, 2013:1). POEs typically focus on project results and resident satisfaction. These were initially designed for use in major social housing construction projects, but were eventually amended and expanded for use in other types of housing projects that included tenement improvements, community-managed improvements, as well as informal settlement upgrading (ibid). Freitas (2004) provides thorough guidelines for assessing the results and outcomes of social housing projects.
Academics and researchers have conducted countless evaluations of the results, outcomes, and occasionally impacts (quality of life, socio-economics, environment) of strategically chosen cases. These are commonly isolated, one-off studies (often masters or doctoral theses) (Pasternak, 2013:2). Also, their focus is often at the policy and program level, though many evaluative studies certainly exist at the project level. New or high-profile, costly programs are often the object of scrutiny (evidenced by the spate of published criticism of the PAC and MCMV programs). Reviews may be of single projects or programs (see for example: Bueno and Hennies’ (1995) evaluation of the Favela Urbanization Program of São Paulo, including an assessment of the strategy, process, and results of the program; D’Alessandro’s (1999) well structured review of a São Paulo program, including baseline assessment with social capital indicators, outcome evaluation, and an attempt to isolate causality; Hübner’s (2002) review of the Programa Baixada Viva/Nova Baixada, and; Soares and Soares’ (2005) assessment of the socio-economic outcomes of Favela-Bairro). Studies may also be structured as comparisons, which often attempt to analyze particular policies or measures (see for example: Bueno et al (2002) comparison of 5 upgrading efforts in terms of replicability, adequacy and sustainability; Ferreira and Motisuke’s (2007) evaluation of the application of the ZEIS zoning tool; Bueno, et al (2009) comparison study of the environmental outcomes of 5 upgrading efforts; Abiko, et al (2007) comparison of upgrading costs across various projects, and; Magalhães and di Villarosa’s edited volume (2012) on lessons learned from nine cases of settlement upgrading).

Many long-standing research institutions support the study of informal settlement upgrades and the policies that enable them. Some are university based (Metropolitan Observatory network, The Housing Laboratory (LabHab), The Institute of Urban and Regional Research and Planning (IPPUR) ) while others are associated with foundations or non-profits (Brazilian Institute of Municipal Administration (IBAM), The Polis Institute). The research agendas of these institutions provide at least some level of continuity in the research landscape.

This body of academic criticism around upgrading has served to frame policy debates, especially in recent years. Following the election of Lula and the creation of the Ministry of Cities, there was even more significant crossover between academia and the public sector, as many progressive academics who had been critical of government policies and programs were invited into public sector roles (Spink, 2011:3).
Evaluation of Internationally-Funded and Large-Scale Upgrading Programs

In the last two decades, several large-scale upgrading programs have taken place. Large-scale refers to both the sum of investment, and the number of households benefitted. Some of these programs have included financing from international actors. This has coincided with the emergence of more reporting and evaluation requirements by international development agencies. However, as these projects had multiple actors, it is unclear to what extent the international actors were the drivers behind the M&E procedures. While the particular role of international actors in promoting M&E has not been verified through this research, it is safe to assume that as lending agencies with more substantial experience of monitoring and evaluating investments, these international actors likely pushed for M&E requirements in the Brazilian upgrading programs they had supported. The following programs involving international actors display some of the earlier documented cases of systematic evaluation of upgrades.

The Guarapiranga program, which ran from 1993 to 2000, included a massive rehabilitation of informal settlements surrounding the Guarapiranga reservoir, one of the primary sources of drinking water for São Paulo. A multi-actor partnership, involving public utilities, the SP municipality, various state level actors, and World Bank financing, was formed to implement this massive project, affording 250,000 resident with urban upgrades, water, drainage and sanitation infrastructure. The program was one of the first to include an integrated approach of simultaneous upgrades and also had a moderate level of citizen participation (a major advance in this era). Guarapiranga also included individual project evaluations and a mid-program reassessment that shifted additional resources to socio-technical support teams (Imparato, 2003:355) and towards improved public spaces (Pasternak, 2013:2) in the second half of the program.

The Habitar Brasil BID (HBB) program, supported in part by loans from the Inter-American Development Bank, “[was] the first urban development experience with a multisector approach on a national scale” (IDB, 2009:22). It included housing, water, sanitation, and environmental actions in informal settlements. It was stipulated that monitoring and evaluation of individual projects was obligatory, and an assessment of the entire program was similarly required (Balbim, et al, 2012:9). The Ministry of Cities, in partnership with academics and practitioners initiated the development of an “indicators matrix” in 2004, for use on projects within this program (Balbim et al, 2012:29). A multitude of case studies were thus developed, documenting diverse contexts, processes, and results of upgrading.
However, the results were less than ideal: the IDB states that “execution of Habitar-Brasil had not been satisfactory at the time of the evaluation” (IDB, 2009:22).

**Favela-Bairro Program**, also supported by the IDB, focused its upgrading efforts on sixteen mid-sized informal settlements (of 500 to 2500 households) in Rio de Janeiro (de Oliveira Lopes and Pegoraro Martins 2010:6). Explicit in its objectives was the integration of favelas into the urban fabric. It also included public consultation, although there are many critiques about the superficiality of such engagement (de Oliveira Lopes and Pegoraro Martins 2010:6). An IDB report states that “there are no measurements based on target indicators that show the effectiveness of the approach used; There are only surveys of public perception that point to doubts as to the sustainability and future viability of the actions...not an assessment based on objective evidence” (IDB, 2009:21-22).

In an internal assessment of the Inter-American Development Bank’s lending and programming portfolio in Brazil (2000-2008), the Bank states that:

> “Added to the lack of performance evaluation systems for the projects was the absence of diagnostic assessments at the municipal level, creating imperfect knowledge and difficulties anticipating problems... The evaluation had problems obtaining sufficiently objective information to draw relevant conclusions as to the effectiveness of the fight against urban poverty” (IDB, 2009:25).

So, while evaluations are being conducted with more regularity, specifically when associated with external lenders, the quality of the evaluations is still under question.

**The Growth Acceleration Program (PAC)** is a nationwide program initiated in 2007 that supported an even wider range of upgrades, including large investments in transportation, energy, sanitation, water, and housing in an attempt to accelerate the country’s economic growth (de Oliveira Lopes and Pegoraro Martins 2010:7). It is managed by the Caixa, the government’s bank and principal executor of federal policy, and does not receive external funding. Some PAC projects have adopted the use of the “indicators matrix” template, used in the HBB program; the “indicators matrix” is the recommended evaluation for all projects and is required of projects of USD $4.5 million and higher (Balbim et al, 2012:29). Additional indicators of interest to the implementing teams may also be included (ibid). After a seemingly successful first round of investments, the program was extended and PAC-2 includes “increased resources to monitor progress on the infrastructure programs and publishes a progress report four times a year” (OECD, 2011:108).
Furthermore, the Institute of Applied Economics Research (IPEA), a government-run foundation, was contracted mid-program to develop a more refined and appropriate evaluation methodology for PAC projects. This system was intended to “verify the achievement of goals and proposed outcomes for interventions, changes brought about in the cities and the benefits to target communities” (de Araujo Braz, nd:1). The IPEA’s proposed methodology is adapted from the Logic Model of project planning. It was piloted on a project that was already completed – the upgrading of the Complexo do Alemão in Rio de Janeiro (Balbim, et al, 2012:9), a USD $500 million project that included the construction of a mass transit gondola, a multitude of social housing projects and community service centers, plus extensive improvements to existing roadways, infrastructure and hillside stabilization. It should be noted that it is difficult, and perhaps methodologically unsound, to retroactively apply the Logic Model to a project that was not originally planned using such a model. Also of great interest is that, even before the evaluation was conducted, the upgrading project was submitted to the Caixa’s “Best Practices” database (see Caixa Best Practices, n.d.).

The Caixa’s manager of planning and evaluation writes that:

“The evaluation of interventions will be part of the routine operations of the Caixa. Their professionals across the country [will be trained] to implement the methodology in other PAC interventions. The implementation of this project is expected to strengthen the culture of evaluation in the implementation of interventions and thereby enable transparency in the application of public resources, contributing to the improvement of efficiency, efficacy and effectiveness of government policies” (de Araujo Braz, nd:1).

While the overarching sentiment of this statement resonates with this present research, it also implies that municipal officials will not be trained to conduct PAC evaluations, but federal employees of the Caixa will. While the present research does not offer prescriptions on who should conduct evaluations, this question is an important element of evaluation methodology that deserves consideration.

The Caixa has clearly advanced the evaluation landscape through proactively improving evaluation methodologies to better fit the projects they are applied to and by committing to training more professionals in evaluation techniques. These actions should improve the quality and usefulness of the data produced and perhaps more closely link evaluation results into future project planning.
**Content and Quality of Evaluations**

These cases show the emergence of monitoring and evaluation activities originating from both within the project and without. As noted in the previous section, a large number of evaluations are conducted by researchers or academics external to project implementation. While these can be very deep and detailed, for example critiquing program logic or underlying assumptions, they are not conducted with any kind of consistency or regularity. And as they’re not directly linked with the project cycle, it’s unclear how they may affect future project planning. Furthermore, because vastly different research questions and methodologies are used, resulting evaluations are not easily comparable. When projects can be compared, there is more potential for meaningful learning and advancement of informal settlement upgrade practices.

Evaluations are sometimes conducted as part of the project cycle, though “generally, only when required by funders” (Pasternak, 2013:2). Save a handful of more advanced programs, most embedded evaluations focus on inputs and outputs: budgets, timelines and product delivery. As such, they tend to be linked more directly with accountability than with learning (Pasternak, 2013:2).

The evaluation of long-term project impacts also rarely occurs. Most evaluations suffer from little or no longitudinal continuity; they are conducted at or shortly after project completion, and never again (Pasternak, 2013:2). Many outcomes and most impacts will not be perceivable without this longitudinal information.

In addition to this smattering of shortcomings discussed in this subsection, Notarbartolo provides a laundry list of issues that affect the quality of current evaluations: “problems with the relevance, format, disjointed nature, flows and timing of routine information; failure of M&E’s products to adapt and appeal to different target publics; ineffective coordination; unclear and diffuse responsibilities; loose and obscure procedures” (2010:173).

But instead of simply critiquing the current practice of evaluation of informal settlement upgrades, it is helpful to assess the factors that inhibit growth and evolution of the practice. Why is evaluation not more broadly used? Why haven’t these issues with evaluation quality been addressed? I will attempt to address these questions in the following section, with a discussion of some of the factors that drive the increasing use of evaluation. While barriers certainly exist, evidence shows that they are progressively being overcome.
**Barriers to Broader Usage of M&E**

In researching the current state of evaluation practice in upgrading projects, it becomes clear that there are several significant barriers that have impeded the broad implementation of evaluation. In this section, I very briefly discuss issues of politics, institutional decisions around financing and project management, and some elements intrinsic to the upgrading process, and how these may hinder the practice of evaluation.

As evidenced in the previous chapter, shifts in national political power typically incite shifts in housing policy and programming. While the previous chapter focused on the federal level policies, the same turnover of housing programs can also be observed at the local level. When a new party comes to power, it is very common that new programs will be launched, even if they are substantially quite similar to the previous ones. It tends to be more a matter of establishing programs that will be directly attributed to their administration, and less about improving outcomes. Even when there is no transition in political power, programs may be dropped and new ones may be launched. Any new program may bring excitement and the much-desired attention of the voting public.

In either scenario, there is a significant amount of programmatic discontinuity. In this political culture that favors newness, existing programs are rarely deeply assessed and amended. Shrewd politicians have no impetus to champion evaluations unless they are quite sure that there will be glowing results; critical feedback can be a career-ender.

As the objectivity of evaluations is questionable, the resulting information may be considered less dependable (and thus less desired). Evaluations may be implemented with an agenda in mind. If using different indicators and methodologies, contradictory findings may be produced from two evaluations of the same project. Because there is no standardized, objective, well-vetted methodology, evaluations can be manipulated to prove politically motivated arguments instead of simply improving the project or program design or implementation to achieve desired outcomes and impacts.

Many public administrators think that evaluation results are not dependable, so they place little emphasis on evaluation. If little emphasis is placed on evaluation, it won’t be well funded and staffed. Without sufficient funding and staffing, the evaluation practice won’t develop into one that produces more dependable information.
M&E have little influence on “the ‘core’ of government and the budget process” writes Notarbartolo (2010: 172). He goes on to explain that “No sustained demand exists for M&E information by different levels of decision-makers” (ibid). Be it for political reasons or otherwise, the lack of importance placed on evaluation, and thus the lack of funding for it quite obviously affect the depth and frequency of its application. As evaluation is not yet embedded in most municipalities’ upgrading project cycles, it is generally not addressed in the project’s budget.

In fact, in the municipalities observed through this research, minimal funding, if any, is allotted to project sites after the central interventions (i.e. housing construction and infrastructure) are completed. The “project” essentially ends at this point. This is one symptom of projects that are technocratically designed and implemented, with heavy importance placed on the technical aspect (e.g. infrastructure and built environment) and less focus on the social aspects (e.g. social capital development).

When construction is complete, the implementation teams disengage from the project site and, in some municipalities, the social work team may do some level of follow-up (Cunha, 2013:2). In the aforementioned Guarapiranga program, socio-technical support teams expressed concerns around the short time frame and budget allotted for their activities, and claim that additional post-upgrade education and community development activities “would have improved the project’s sustainability” (Imparato and Ruster, 2003:339).

When post-project evaluations do take place, it is often these social work teams that conduct them. However, as different groups of professionals do the planning, implementation, and post-occupancy work, it is unclear how much of the evaluative information actually cycles back to those who plan and implement. Without a clear feedback loop, information may slowly infuse through the organization, but in an inefficient way.

As upgrading projects become more complex (e.g. when more inter-sectoral coordination and collaboration are required) it becomes even more important to embed systems of monitoring and evaluation into the project. These systems may help support efficient project management, and promote information production and flow among the various teams and managers involved. But this proves to be a very complicated task. Given the diversity of potential actions involved in an upgrade (e.g., from building a staircase, to installing a new health clinic, to constructing a mass transit system), it is difficult to establish consistently rigorous methodologies that adequately capture the dynamics at play. To further complicate potential evaluation methodologies, the diverse elements of an upgrade
may have vastly different timeframes for implementation (Bueno, 2011:1). For example, housing
upgrades may take a few months, while land titling may take years. Moreover, the quality of life impacts
of upgrades (and each of their composite elements) may take even more years to experience and
perceive through evaluation.

While the slow advance of evaluation practice within the housing and urban development sector may be
partially attributed to these factors, time also plays a major role. Quite simply it takes some time for
practitioners and policy-makers to become familiarized with emergent evaluation methodologies, to be
willing to invest in them and to become confident in their abilities to successfully conduct them. This
next section aims to show how, with some time and other contributing factors, these barriers may be
overcome.

**Promising Trends and Conducive Conditions**

While many barriers do impede the practice of monitoring and evaluation for upgrading projects, there
are many positive trends that show increasing support and amenable conditions for expanding the
practice.

First, the federal political environment in Brazil over the last decade has been very stable. With this
stability comes a certain level of consistency and continuity in the reign and governance of politicians,
bureaucrats, and policies. This allows programs to reach full cycle and the potential for evaluation to
take place. The increasing national economic prosperity and growth also helps drive this political
continuity and consistency.

Second, urban planning has also become a more refined and common practice. As mentioned in the
previous chapter, plans are now required of cities with populations of 20,000 or more. A recent study by
the Institute of Urban and Regional Research and Planning (IPPUR) and federal government actors
included quality assessments of over five hundred of these master plans, which indicate that there is
great interest in improving plan quality (dos Santos Junior, 2011). Once instated, master plans can
outlive the terms of local politicians, adding another level of local policy consistency. This opens the
door for a “culture of planning” to develop, a culture which invites structured reflection, or in one word,
evaluation.

Third, there is increased clamor for greater public accountability of officials, institutions and
international donors. As part of the radical political transformations in the last three decades, in which
public leaders are now democratically elected, there is now increasing political accountability to the public. The public is also increasingly aware of public policy and programs, and thus more capable of holding their leaders accountable. The practice of participatory budgeting has incited direct community interest in following up with program implementation and ensuring that planned projects are completed and promises are met (Fialho, 2011:2). Evaluative practice is a key transparency instrument, used to help prove or disprove conformance with stated policy objectives.

In the early years of settlement upgrading, a “heroic, do-anything” mentality drove the development of municipal housing programs; the extent of the housing crisis called for immediate action, and new and experimental solutions emerged (Spink, 2011:4). Over time, experiences with upgrading accumulated and new understandings of urban dynamics emerged. With these developments comes the impulse for designing more sophisticated policy responses that improve the efficiency and outcomes. This gradual transition falls in line with global moves towards evidence-based decision making, with the aim of removing “ideology, ignorance, and inertia” from public policy making (Banerjee and Duflo, 2011:16). Fourth, there is now a critical mass of interest in finding the most effective ways to intervene. Some refer to this as a level of policy- or program maturity, in which multiple outcomes may be simultaneously addressed:

“Brazil has reached a level of maturity at which it is necessary to think about reducing the housing deficit without sacrificing the sustainability and quality of its cities. Public policies must pay special attention to the general aspects of durability and integrated responses, with particular emphasis on location, construction patterns, environmental impacts, efficiency in the use of natural resources, and others, so that the solutions proposed for urban and housing problems are compatible with the objective of raising the quality of life and the environment in the cities.” (Magalhães and di Villarosa, 2012:106).

The above four positive trends, however, are accompanied by challenges in human resource development and capacity-building. Once political leadership has sufficiently recognized the role of evaluation in potentially improving program outcomes and impacts, the missing pieces of the puzzle are practitioners capable of adequately designing and conducting consistent, high-quality evaluations.

Major advances have been made in the training and education available to prepare skilled professionals for informal settlement upgrading, and indeed evaluation. Improvements have been made across the varied disciplines involved in upgrading, with training now offered by universities, university extensions,
and NGOs (Pasternak, 2013:2). While a 1993 review of university engineering and architecture programs in the state of São Paulo, found that not one offered courses on informal settlement upgrades, there are now several (Bueno, 2000:148). The Administrative Development Foundation (Fundap) also offers a continuing education course that trains government management officials in strategic planning and the development of monitoring and evaluation systems (Fundap, 2006). However, the course is mainly focused on monitoring and less instruction is provided on how to analyze and evaluate the data produced.

The Ministry of Cities has also taken a strong leadership role in disseminating information and supporting training on good upgrading practices, including monitoring and evaluation. Its training materials have reached recent students and mid-career professionals, through university courses, distance education, and other forms of distribution.

In collaboration with the Cities Alliance, and the University of São Paulo, the Ministry of Cities’ distance education course on “integrated slum upgrading” includes a wealth of information on M&E for municipal officials (Ministério das Cidades and Aliança de Cidades, 2010). Materials include an introduction to basic concepts of M&E, criteria for project evaluation, types of M&E, the essential elements of participatory evaluation and rapid participatory appraisal, organizational requirements, an introduction to the Logic Framework of project design and management, and step-by-step instructions for designing and conducting appropriate evaluations and evaluation products (Notarbartolo, 2010:172-195).

The recommended framework for evaluation is fairly comprehensive, advising that the following dimensions be evaluated: basic infrastructure, urban mobility, environmental quality, housing, tenure regularization, access to public services, public participation, insertion into the job market, and beneficiary satisfaction of housing, urban services, and social and community life (Notarbartolo, 2010:199). For example, this matrix (in Figure 17) describes elements within the ‘basic infrastructure’ dimension.
The Ministry also suggests that municipalities track indicators, such as: housing deficit, evolution of land markets, environmental impacts and hazards, and municipal revenue related to the development of the property market (Notarbartolo, 2010:196).

Though the Ministry advances this solid framework for monitoring and evaluation of development, both tied to project cycles and as general indicator tracking, this research was unable to clarify how the Ministry intends for these processes to fit into municipal organizations and funding structures. Further, there is a lot of uncertainty regarding the rate of municipal uptake, or the number of municipalities that voluntarily employ these M&E methodologies when not required to do so by the Ministry.

The practice of evaluation has also become the object of intense critique and study. A recent “meta-evaluation” developed by the Instituto de Pesquisa Econômica Aplicada (IPEA) assessed the quality of 27 different project evaluations, completed in the last decade as part of the Habitar Brasil BID (HBB) program. While the HBB program was run through the Ministry of Cities, the implementing actors
(federal, state, or municipal) were in charge of conducting evaluations. These project evaluations are publicly accessible on the Ministry of Cities website.

This recent assessment of HBB project evaluations commented on the quality of evaluations, particularly their use of “a diversity of formats and methodological procedures” (Balbim et al, 2012:8), making the evaluations difficult to compare (Balbim et al, 2012: 51). Moreover, the reviewed evaluations did not make explicit links to a next phase, in which the information may be used for future project planning or public policy review, and the end was compliance with the reporting requirement, not a utilization of the information produced (Balbim et al, 2012:49). However, the mere fact that the practice of evaluation was analyzed in such a structured way is a clear indication that evaluations are not only gaining more visibility in the housing and urban development sectors, but they are also undergoing processes of development and refinement.

In his review of Canadian municipalities’ use of M&E, Seasons notes that “context – political, institutional, and organizational – often determines the nature of monitoring and evaluation practice” (2003:437). The same rings true for Brazil. While there is no officially stated long-term strategy or vision for what the M&E of upgrading will look like in the future, the practices are developing and improving incrementally. The discussed trends of political stability, increased accountability, training and education, and meta-evaluation all support the future expansion and refinement of the monitoring and evaluation of informal settlement upgrades. Thus, while current evaluation practice indicates that evaluation is sporadically applied to settlement upgrades, and often in fairly superficial ways, the conditions are ripe for continued growth and development of M&E in this sector.

Along the spectrum of actors involved in Brazilian upgrading, many opportunities exist to increase and improve the use of evaluation and integrate it into common practice. Among citizens and beneficiary communities, there are great opportunities to grow the practice of meaningful participatory evaluation. With an increasing voice in the prioritization, design and roll-out of projects, local communities also have a strong stake in monitoring and evaluating the results of these interventions. While this is already commonly practiced through informal means and occasionally supported through research organizations like the Metropolitan Observatory, it is possible to engage in this practice in more formal ways and potentially as an integrated element of the project implementation (when the primary implementing actor is amenable). Local populations serve to benefit from participatory M&E by ensuring that local perspectives are heard, the desired quality and characteristics of interventions are achieved, and the use of public resources has been effective and transparent.
Municipalities or other implementing actors have their own incentives for increasingly adopting M&E practices. As municipal staff become more highly trained and professionalized, there may be more drive to amend and improve the projects and programs within their control. More and more resources are available to help project designers and managers conduct M&E practices that can provide vital information for making adjustments and improvements over time. The increased intersectoral collaboration in upgrading may present some challenges in terms of designing adequate M&E plans, but may also yield very beneficial results in terms of heightened coordination among the variety of actors involved. When receiving external funding, municipalities will likely have M&E and reporting requirements to meet as well. This poses a challenge for municipal organizations to develop an institutional culture and evaluation practice which successfully meet the desires for both learning and accountability.

Federal level actors, such as the Ministry of Cities, are poised to learn a great deal from M&E practices. As with municipal and other implementing actors, federal actors may also receive external funding and be obligated to conduct M&E and report back to their funders. As funders themselves, federal agencies will likely wish to hold state and municipal actors accountable for their use of these funds. As policy makers, they would potentially (and ideally) be interested in learning about the results and effectiveness of different approaches to municipal- and state-led upgrading. In this way, they may improve policy and program direction and allocate funding in order to enhance outcomes and impacts.

All of these actors have the opportunity to shift their internal practices to better reflect the principles of “learning organizations” (refer to the “Embedding M&E within an Organization” section). This means facilitating change from within, by inviting feedback, critical analysis and “downward accountability” (Gaventa and Blauert, 2000:233). Open and communicative organizations have an enhanced ability to change, adapt, and respond to new circumstances or understandings. Within this dynamic and flexible environment, innovation may prosper.
Conclusion

Monitoring and evaluation are increasingly cited in international development and academic literature as essential elements of the development process. Scholarly works have debated the merits of a wide variety of evaluation methodologies and approaches. International organizations have almost universally adopted internal M&E mechanisms and have published dozens of prescriptive texts and manuals outlining preferred practices. International researchers, mostly associated with the development industry, have published prescriptive texts specifically on how to monitor and evaluation settlement upgrading. However, a large gap in understanding exists around the evaluation practices of entities that directly implement informal settlement upgrades. With this research, I sought to fill this gap, by studying the evaluation practices of Brazilian informal settlement upgrading.

As demonstrated, Brazilian municipalities have conducted upgrading projects and programs for several decades. Approaches and techniques have evolved over this time, as have the policy, institutional, and financial mechanisms around upgrading. Even though Brazil has a great deal of experience in upgrading, its evaluation practices are far removed from the normative recommendations of international literature.

The present research shows that evaluations of informal settlement upgrading in Brazil are not broadly embedded in project cycles, save a few federally and externally funded programs. These evaluations tend to be focused on conformance and outputs, tracking timelines and expenditures and reporting on basic conditions. Rarely are deeper level outcomes and long term impacts understood from these evaluations.

The other common form of evaluation, conducted by academics or researchers, is sporadically and unsystematically applied. These evaluations vary in focus, from policies, to legal instruments, to programs and projects. They often center on research questions, with distinct theoretical stances and research methodologies. Hence, they are far from standardized and quite difficult to compare.

While the current practices of evaluation are very valuable and have indeed advanced Brazil’s policy agenda around housing and informal settlements, they do not sufficiently capitalize on the learning opportunities that exist. Academic commentary will likely continue serving a role in questioning policies and practices and pushing the housing and development sector forward. But there’s a very important role for practitioners within the sector to critically reflect on their work and advance their knowledge.
and practices (as an individual, as an organization, and as a field of work). In this category of evaluations that are embedded in project or program cycles, Brazil is poised to experience substantial improvements in coming years.

Shifts in the political and institutional landscape of Brazil’s housing and urban development sector will support the continued advancement of evaluation practice. The sector is prospering in an era of political progressiveness and stability, with increased continuity of politicians, bureaucrats, policies and programs (at all levels of government). Urban policy direction and inter-sectoral coordination are now supported through the Ministry of Cities, as well. The last two decades have also seen more policy continuity at the local level, with, for example, an increase in master planning practices. Given this relative stability, housing and urban development programs are more likely to reach a point of “maturity”, in which assessment and refinement may be welcomed. This is further promoted by the trends in professionalization of municipal staff, with expanded training and educational programs now available. Additionally, the demand for evaluation is increasing as civil society pushes for improved government accountability and transparency. Within the public sector, evaluation methodologies are also being studied and refined to improve the usability of findings. Overall, the practice of evaluation is receiving increased attention and commitment from entities involved in settlement upgrading.

These elements clearly point to an evaluation practice that is undergoing expansion and enhancement, but substantial shifts in mentality, organizational culture, and usability of findings will be required for evaluation to be embraced as more than just a reporting requirement. The World Bank concedes that, “For M&E to succeed, municipalities have to regard it as a useful tool for themselves, not just an instrument for government control or academic research by others” (2009:21). There must be real incentives in place for municipal practitioners to take on additional tasks or work requirements. And for evaluation to truly become embedded in the organization, its value in supporting learning must be broadly recognized and embraced.

I posit that, partially due to evaluation practices, Brazil’s upgrading practices will further advance and develop in coming years, through a process of iterative program and institutional learning. Advancing evaluation practices may both improve the outcomes of Brazil’s upgrading and provide much-needed information for many cities of the Global South.

Cities around the world, particularly in the Global South, are experiencing rapid population growth and the formation and expansion of informal settlements, with an estimated 1 billion new informal
settlement residents by 2030 (UN-Habitat, 2007:1). The techniques developed and lessons learned in the Brazilian context may prove very beneficial to these cities, as they respond to this growth and plan for the future. This type of “South-to-South” sharing is being promoted by a variety of actors, including many of the large banks and development agencies (e.g. World Bank, UNDP, DFID). Substantial technical cooperation and information sharing between Brazil and South Africa is also underway (see Huchzermeier (2004) and The Metropolis Association). Even Brazilian lessons in evaluating housing programs are already being shared with officials and academics from other countries (Ministerio das Cidades, 2012:1). Given the speed and scale of urbanization and informal settlement growth in much of the Global South, the Brazilian example of upgrading offers a prime opportunity to learn from well-established programs and help prepare for the global urban transition.
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naldi.pdf on 7 February, 2013.


Appendix

List of Interview Participants

Mirna Quinderé, Director of Settlement Upgrading, National Secretariat of Housing
Suzana Pasternak – Professor, FAU-USP
Laura Bueno – Professor, PUC-Campinas
Jeroen Klink – Professor, UFABC
Margareth Matiko – Polis Institute
Aldaiza Sposati – Professor, PUC-SP
Peter Spink – Foundation Getulio Vargas
Mario Reali – Mayor of Diadema
Marta Cirera – Internal Secretary of Housing, City of Diadema
Marcio Vale – Director of Housing and Urban Development, City of Diadema
Orlando Alves dos Santos Júnior – Professor, IPPUR-URFJ
Kazuo Nakano – Polis Institute

Sample Interview Guides

In English

What types of upgrading projects/programs have you participated in and with what roles?

geographic scope of program

budget

institutions involved in each (donors, IDAs, government, etc)

What types of M&E systems do you have experience with?

Was monitoring and evaluation a part of the original project/program design?

Was the M&E plan adapted during the implementation of the project?

What was the percentage of project resources (financial and staff time) dedicated to M&E?
input/output

impact

What institution defines the M&E plan OR Through what process is it defined?

Who generally carries out the data collection? How?

Do you have any examples of particularly successful or innovative systems for M&E?

Are you aware of or have you used standardized impact indices that are applied across multiple projects? Or multiple sectors (e.g. transportation, basic services, housing, etc)?

Have you worked on any projects that have employed participatory evaluation?

How do M&E systems take into account the complex variety of factors that lead to development impact? In other words, how are a project’s impacts isolated from the impacts of other factors and how are causal relationships drawn?

What kind of development impact indicators are used?

Is there a particular weighting (for use in evaluation) associated with individual indicators?

What is the timeline/frequency for measuring development impact?

Are there any impacts that are difficult to capture with available indicators/ data sources?

How are these impacts generally dealt with?

Have certain types of projects (e.g. within a particular sector or using a specific process) proven more cost effective in bringing about development impact? For example, are there particular housing strategies that are more cost effective in bringing about development impact? Are there specific types of participatory processes that lead to increased development impact?

Within your institution, is there a funding formula based on predicted development impact of projects?

At what level of government are funding priorities established, that affect the types of projects (sector-specific) that will be undertaken at the local level? For example, housing vs transportation – are the budgets for each sector set at the national level? Are there discussions of relative development impacts of each sector? Is funding specifically earmarked for poor areas, or does each Ministerio choose how it will allocate funding?

Within participatory budgeting processes, how are relative development impacts of projects presented and discussed?

How are community priorities taken into account? At the outset, before funding has been allocated to anything? Or are funding priorities defined, then funding is allocated to cases/locations fitting that profile?
How does M&E feed back into project implementation (if impact can be measured during the course of a project) OR into the overall program or institution (when impact is measured after a project’s implementation)? Are your institution’s funding priorities shifted depending on feedback regarding impact?

Is there an outside audit of development impacts?

In Brazilian Portuguese

Quando na política e programação habitacional brasileiro emergiu formalmente a prática de avaliação?

Você tem alguma evidência de que as avaliações estão sendo cada vez mais implementadas (baseado em sua experiência pessoal ou estudos)?

Todos os projetos da sua organização (ou financiados pela sua organização) são avaliados após a conclusão?

Dentro do programa PAC, quem é responsável pela avaliação dos projetos?

Os resultados de avaliação são verificadas por terceiros partidos?

São as avaliações de projetos governamentais ou municipais disponibilizados para o público?

Os municípios geralmente conduzem avaliações como uma parte normal do ciclo de projeto, ou apenas quando requerido por financiadores?

Existem agora mais programas de treinamento baseados na universidade para preparar os profissionais municipais?

Existem agora mais capacitações para os profissionais de meio da carreira, realizadas por universidades, órgãos governamentais ou outras entidades?

Nos projetos de municípios, parece que os assistentes sociais acompanham os projetos pos-urbanização, não os urbanistas, por um corto período (até meses). Esta observação concorda com o seu entendimento?

É a informação resultante das avaliações usada para informar as decisões futuras sobre o design e implementação de projetos ou as prioridades do programa (dentro de sua organização; dentro da maioria dos municípios)?

Quão comum é a avaliação de impactos (que mostram efeitos amplos na qualidade de vida, de longa duração) versus a avaliação de resultados simples do projeto (por exemplo, número de casas construídas)?
As avaliações são utilizadas para comparar os impactos de projetos em diferentes sectores? Por exemplo, são os impactos de projetos de transporte comparados com os impactos de projetos habitacionais, talvez a fim de determinar as prioridades de financiamento?

Existe uma “cultura de planejamento” crescente em órgãos públicos? A que se pode atribuir?

De sua perspectiva está mudando/evoluindo a “cultura de avaliação” (no Brasil, em sua organização, em outras organizações)?

É a avaliação reconhecida como um elemento fundamental do processo de aprendizagem?

ou é mais estreitamente ligada à transparência e a contabilidade?

Quais outros desafios ou barreiras atualmente impedem a ampla utilização de sistemas de avaliação?

É o Censo de 2010, a primeira vez que os assentamentos precários foram sistematicamente e universalmente pesquisados em todo o país? Existem problemas com a precisão dos dados do Censo?

Você conhece algum estudo de caso exemplar ou inovador (por exemplo a avaliação participativa; pesquisas pós-ocupação longitudinal; com designo experimental; com críticas sobre as estratégias, técnicas, e processos do projeto)?

Existe alguém que você recomenda que eu contacte para este estudo?

Quaisquer comentários ou recomendações adicionais?