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NGOs as Intermediaries for Pro-Poor Electrification in India

Urban Development in a Post-Neoliberal Era?

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Abstract

Neoliberalism is generally associated with certain paradigmatic regulatory experiments, such as privatisation, deregulation, trade liberalisation, financialisation, structural adjustment, welfare cutbacks and monetarist shock therapy. Prominent observers of the global economy swiftly proclaimed the “end of neoliberalism” after the global economic crisis of 2008. This paper shares the experiences of two Indian NGOs participating in a multiple-stakeholder pro-poor urban electrification programme that was designed to demonstrate a viable alternative to neoliberal models of basic service provision. By 2008, close to 100,000 homes had been electrified in the city of Ahmedabad and the programme is currently being replicated in smaller cities in Gujarat and in the neighbouring state of Rajasthan. The broader findings from this research suggest that the news of neoliberalism’s demise may be greatly exaggerated. The “alternative” practices and strategies that have emerged more recently, such as the ones documented in this article, may challenge certain aspects of neoliberal thinking even as they reconfigure and recalibrate others. Although this case study cannot in any way enable us to gauge if India is moving toward “post-neoliberalism”, it does highlight the importance of documenting and understanding sub-national scales and actors in experimenting with and testing alternatives to market-based solutions.

Keywords

urban poverty – electrification – slums – neoliberalism – NGOs – India – South Asia

Introduction

Access to electricity is still only available to two-thirds of the world's population. Worldwide, 2.4 billion people rely on traditional biomass for cooking and 1.6 billion people do not have access to electricity (UN-Energy, 2005). While electrification is not a sufficient condition for economic development, it is socially desirable, and it has globally been strongly correlated with wealth (Ferguson et al., 2000). A growing body of literature analyses how access to electricity benefits rural and urban communities in developing countries (Barnes, 1997; Ghanadan, 2004; Pasternak, 2000). Electricity provides a wide range of economic and social benefits, such as greater potential for education due to better lighting, savings in time and effort spent gathering traditional fuels, potential for improved access to information and digital connectivity, scope for greater productivity and improved health services, and improved indoor air quality (Waddams Price, 2000; World Energy Assessment, 2000). In recent years, some researchers have more specifically identified the benefits of electricity as they relate to the Millennium Development Goals for eradicating poverty and hunger; achieving universal primary education; promoting gender equality; reducing child mortality; improving maternal health; combating HIV/AIDS, malaria and other diseases; and ensuring environmental sustainability (Flavin and Hull Aeck, 2006; Ha and Porcano, 2005).

This paper shares the experiences of two NGOs in India—the Self-Employed Women's Association (SEWA) and *Saath*—that have participated in a multiple-stakeholder pro-poor electrification programme that has electrified nearly 100,000 homes in the city of Ahmedabad and is currently being replicated in other smaller cities in Gujarat and the neighbouring state of Rajasthan. The author draws upon academic literature on urban infrastructure provision, governance and politics in cities of the Global South to construct theoretical anchors and a framework of analysis for findings. She employs a pricing survey carried out by *Saath*, project reports prepared by NGOs and international aid agencies, internal and external evaluations of the project, and interviews with staff from the NGOs and the electricity utility in order to analyse the project in terms of its impacts upon access, tariffs, quality of service, tenure security, and its role in empowering women through the formation and maintenance of community-based organisations (CBOs). The author also identifies policy inputs that may optimise NGO participation in the design and implementation of pro-poor electrification activities, and in the energy reform process in general.

Neoliberalism is generally associated with certain paradigmatic regulatory experiments such as privatisation, deregulation, trade liberalisation, financial-

isation, structural adjustment, welfare reform and monetarist shock therapy. Many prominent observers of the global economy swiftly proclaimed the “end of neoliberalism” after the economic crisis of 2008. Findings from this research suggest that the news of neoliberalism’s demise may be greatly exaggerated. The alternative practices and strategies that have emerged more recently, such as the one documented in this paper, may challenge certain aspects of neoliberal thinking, even as they reconfigure and recalibrate others. Although there are promising alternatives to privatisation for the delivery of basic services, such as water and electricity, I would caution against describing these strategies as post-neoliberal or post-capitalist. Involving NGOs and other civil society institutions in service delivery may challenge certain limited notions of neoliberalism, while simultaneously entrenching and reconstituting others. Particularly in the Indian context, where the role of the welfare state has remained strong throughout the decades of economic liberalisation starting in the 1990s, an enlarged service delivery role for NGOs and other civil society actors may actually serve to entrench neoliberal policies and further commodify social relations.

Electricity Reform and the Urban Poor

In the last few decades, many countries around the world have reformed their electricity sectors. This has been justified in developing countries by the unsatisfactory performance of state-regulated and controlled power regimes. While different countries have chosen different models of reform, the overall direction tends to focus on commercialisation of state-owned facilities (or outright privatisation), deregulation and competition as key elements, often within the context of larger macroeconomic restructuring that has involved other service sectors, such as water, transport and telecommunications. In countries like India and South Africa, for example, the electricity sectors were at the forefront of newly-liberalising economies. The rationale behind reforms in services like electricity is that efficiency, commercial pricing, and greater involvement by the private sector will reduce pressure on national and local government budgets and create a profitable sector, which in turn will finance necessary investments for improvements in service and access (Bacon and Besant-Jones, 2001; Kessides, 2004).

In many countries, including India, this marketised vision of electricity provision represents a dramatic shift in policies that had guided the sector previously, serving to unravel post-Independence public-service models of state-led development, in which electricity and water, among other services, were part of

broader goals of nation building and explicit policy mechanisms for redistribution. These changes also involve subjective shifts in the vision and promises of development, influencing people's expectations, relations with the state, and understanding of national identity and citizenship (Ghanadan, 2010). Today, many infrastructures built within the context of public or private monopolies and aspirations toward "universal services for all" now operate according to imperatives of profit maximisation and the prioritisation of privileged users and markets. This "splintering" of infrastructures can involve the construction of new "premium" spaces or networks, such as high-speed train lines, electronically tolled highways, skywalk city streets, privatised streets, or broadband communications networks, which bypass or become removed from the legacies of the inherited infrastructures (Graham and Marvin, 2001). More subtly, it may encompass the withdrawal of essential services from poorer or less profitable groups or spaces, as efforts concentrate on addressing the more profitable market segments. It may also be associated with tendencies to privilege selected premium infrastructures, whilst reducing essential public involvement and maintenance from the wider inheritances of infrastructure converging entire, cities, regions or nations (Graham, 2000). Thus, despite profound inequalities in water, sanitation and electricity service provision, India and Nigeria, for example, have the fastest growing mobile phone use in South Asia and sub-Saharan Africa respectively. Authors like Gandy (2005) have written about the "concrete divide" between the rapid spread of new telecommunications technologies throughout cities in the context of widening inequalities in social and environmental conditions. There is growing evidence around the world that neoliberal reform has been designed more to address macroeconomic concerns and to satisfy donor conditionalities, and with less consideration for social justice and equity issues (see, for example, Dubash, 2002; Wamukonya, 2003a).

It is simultaneously important to emphasise that although the liberalisation of the Indian economy—starting in the early 1990s and continuing today—created a much larger role for private and foreign investment, the role of the welfare state has also remained strong. It has been argued by some (see, for example, Baruah, 2007a) that the Indian government has at all levels (federal, state and municipal) had difficulty, despite pressure from international financial institutions and powerful corporations, letting go of the conventional role of service provider, and the inherent prestige and power that goes with it, to that of a facilitator and enabler that devolves responsibility to either the private sector or NGOs. State-led labour and welfare schemes, such as the National Rural Employee Guarantee Act, which aims to provide livelihood security in rural areas by assuring at least 100 days of guaranteed wage employment in a finan-

cial year to every household whose adult members volunteer to do unskilled manual work, have been expanded rather than eroded through the 1990s and 2000s. Other previously public sectors and services, including electricity, have often been commercialised, rather than privatised to generate revenue and growth. The practice of selectively protecting some institutions and practices of the development state can at least in part be attributed to the numeric power of the urban and rural poor electorate in India, whose support neither the political left, nor right can afford to lose. Thus, unlike neoliberalism in the Western or Latin American context, neoliberalism in India, as in many other Asian countries, is better described as “neo-developmentalism” or “neoliberalism plus”.

Today, electricity delivery in most countries involve three key stakeholders: the government; the electricity company (either a private company or a commercialised state electricity board); and the consumers. The role of government is to safeguard public health and safety, which in turn implies overseeing the safety, quality and cost of electricity supply, and authorising tariffs—possibly even allowing for cross-subsidies for low-income consumers. Since land ownership and tenure falls under the government’s purview, it also has the power to authorise right-of-way for utility infrastructure, such as distribution lines and transformers. The role of the electricity utility is generally limited to providing infrastructure in the form of meters and wiring, billing and payment collection for the service, and maintaining the quality of the service provided in accordance with the rules that govern electricity supply. Consumers typically have no role in electricity delivery other than to expect that they will receive electricity reliably and safely as long as they pay their bills regularly. In India, most people are far removed from the policy processes that govern electricity reform and have virtually no ability to influence the process or to articulate their concerns. With the notable exception of the Pune-based organisation, *Prayas*, very few public-interest or advocacy organisations have raised alternative perspectives on energy issues or played a watchdog role in electricity reform (Prayas, 2007). Consequently, electricity reform has taken place largely out of public view in India and in most other countries of the Global South.

Such reforms have not met the needs of the vast majority of the world’s informal settlements, where most transactions are informal and not regulated by the government. Consequently, in many developing countries, increasing access to electricity—especially for rural customers who are off the grid and the urban poor who are grossly underserved—is an urgent need. In the urban context, slum upgrading efforts tend to prioritise water (and even sanitation, which was previously often neglected) over electricity because these services are more

essential for sustaining life and good health. Unlike water, for which there is no substitute, electricity can, albeit sometimes dangerously, be substituted with paraffin, coal and other energy sources. Electricity is also quite easy to steal and illegal electricity supplies are almost universally available in slums. Slum dwellers are willing to risk physical danger and possible prosecution to steal power themselves or to enter into agreements with illegal service providers. This is true in other contexts of expensive or limited access, where the poor have no choice but to find alternatives to utility suppliers by illegally tapping into “formal” or “legal” supplies. In Rio de Janeiro, informal or illegal connections made to water and electricity infrastructures are called *gatos* [cats]. They are often the only means by which urban poor communities can gain access to the city mains since regularisation of settlements can be extremely slow and may not entail infrastructure provision (Fabricius, 2008). Therefore, for many of the world’s urbanites—especially those in the burgeoning informal settlements that dominate many cities in the Global South—achieving an electricity, water or communication service is the result of a constant process of improvisation (McFarlane, 2010). Graham (2010) writes that for such urbanites, infrastructure networks are far from being black boxes that almost miraculously and invisibly bring electricity, Internet connections, water, or food to any point or space. Instead, they are highly political assemblages or artefacts and practices within which continuous efforts at agency, or resistance, may—just may—allow services to be improvised, often beyond the bounds of markets and strict legality. That the urban poor value and need access to water and electricity is borne out by the fact that they pay for it almost globally at a higher per unit cost than people in legally served areas (McDonald, 2009a; USAID, 2004).

Since many governments barely even acknowledge that slums exist in their cities, slum dwellers typically have no legal entitlements to basic services. Informal and illegal systems grow in response to unmet demands for basic services, such as water and electricity. Because the majority of the unserved populations reside in rural areas and in urban informal settlements, their load demands and incomes are low, and connection costs are frequently unaffordable. For example, low-income households in South Africa account for probably no more than five per cent of national electricity consumption, with relatively little per capita demand growth on the horizon (McDonald, 2009a: 16). Private electricity companies (and state-owned commercialised utilities) are expected to operate on a cost effective and profitable basis. Even if governments expect and stipulate that private companies also provide services to economically weaker groups, electrifying such communities is often not financially attractive for the private sector for a number of reasons.

The narrow streets and alleys typical of slums raise the costs of serving such areas. The challenges of obtaining right-of-way documents to serve largely illegally settled areas also deter electricity companies from attempting to serve slums. Additionally, there may be physical risks for utility staff—particularly if they are seeking payment—in entering slums. Because their incomes are low or erratic and access to savings and financial services tends to be limited, poor households are also unable to, or unaccustomed to, making large lump-sum payments for connection. Competing illegal suppliers often succeed where legal providers fail, even when they charge more per unit cost, because they are familiar with slum communities and can package their services in ways that poor households find more affordable, such as monthly charges per appliance or flexible payment terms for connection and reconnection. Since illegal suppliers typically steal power from legal power lines and do not assume the cost of production and transmission of electricity to the locations they serve, they are able to offer much more flexible terms of payment. Within the private sector there is also an assumed culture of non-payment in informal settlements. The theft or “non technical” losses associated with slum communities represent only 3 to 5 per cent of global revenue from electricity (USAID, 2004). Non-payment has been demonstrated to be far more rampant and significant in government agencies, large farms, corporations and middle-class homes (Wamukonya, 2003a). Nevertheless, all of these real and assumed deterrents severely limit private providers’ interest in undertaking slum electrification efforts.

It is possible to argue that the informal or illegal arrangements that currently exist in urban informal settlements are a relatively painless way for better-off sections of society to subsidise the energy needs of the impoverished. Such arguments would, however, ignore compelling reasons for the urban poor to have access to legal electricity. First, illegal electricity supplies are notoriously unreliable and unsafe. Providers can and do cut off supplies at whim for days on end. Slum residents in Ahmedabad, India, where research for this paper was conducted, complained that the illegal service provider cut off their electricity completely for four or five days a month, and sporadically at least once a day for several hours. Additionally, the voltage fluctuated uncontrollably during the day and was almost always very low at night. Despite the poor unreliable service, they were also cut off if they failed to pay their monthly “dues” on time. The use of flammable energy alternatives when power is cut off (or unavailable to begin with) as well as faulty wiring and paraffin poisoning have caused devastating fires, destroyed homes, killed, injured and displaced tens of thousands of poor people in cities around the world (McDonald, 2009; SEA, 2006). Second, although the terms of payment of illegal suppliers may be better

suited for the low and volatile incomes of the urban poor, per unit costs are much higher than those charged by legal suppliers. Finally, illegal supplies do not in any way strengthen or validate the urban poor's entitlements to secure land tenure. Formal land titles and sale deeds are still not available to the vast majority of slum dwellers. User charge documents, such as water and electricity bills, are perceived to be empowering by slum communities because they represent a *de facto* form of tenure security. People who have lived on the margins of society all their lives are eager to embrace all such symbols of "official" recognition because they strengthen their right of residence in their homes and communities and provide a certain level of protection from eviction.

There is clearly a need for innovative approaches to provide affordable legal electricity to slum communities. Researchers working in other regional contexts in the Global South—Tanzania, South Africa, Kenya and Uganda, for example—have written specifically and explicitly about the need for NGOs, universities and other civil society engagement in electricity reform by providing adequate means of participation and oversight to create checks and balances between financial and development goals (Ghanadan, 2009; McDonald, 2009b). As with multiple-stakeholder initiatives for water and sanitation, certain civil society organisations are suitably placed to work in partnership with government agencies, electricity companies, urban poor communities and donor agencies to design and implement pro-poor slum electrification programmes. The rest of the paper shares results and lessons from one such programme in urban India. This case study cannot in any way enable us to gauge if India is moving toward "post-neoliberalism," but it does illuminate some of the ways in which various state and non-state actors has responded to provide services that the state used to exclusively—albeit never satisfactorily—provide before the liberalisation of the economy. Findings from this study also highlight the importance of documenting and understanding sub-national scales and actors in experimenting with and testing alternatives to market-based solutions.

The *Ujala Yojana* Slum Electrification Project

With a population of over five million in 2006, Ahmedabad is the largest city in the western state of Gujarat and the seventh largest metropolis in India. The Self-Employed Women's Association (SEWA) was founded in Ahmedabad in 1972 to organise women in the informal sector for better working conditions and social security provisions. *Saath* is a smaller NGO based in Ahmedabad

with a mandate to improve access to health, education, infrastructure services and livelihoods options for the urban poor. This paper does not seek to provide detailed documentation of the two NGOs' activities and accomplishments other than those that relate to slum electrification. There are many excellent resources that document SEWA's history and organising philosophy (see, for example, Rose, 1992, and Bhatt, 2006). Additional information about SEWA and *Saath* can also be found on their websites: www.sewa.org and www.saath.org.

A survey conducted by the Ahmedabad Municipal Corporation (AMC) in the mid-1990s revealed that 42 per cent of the city's population, or approximately 1.2 million people, live in slums that lack the most basic amenities (Kundu and Mahadevia, 2002). Another study conducted by SEWA revealed that 97 per cent of its urban membership lived in slums (Rose, 1992). The Gujarat Mahila SEWA Housing Trust (MHT) was established in 1994 as a SEWA sister organisation with the overall objective of improving the housing and infrastructure conditions of poor women in the informal sector. Since 1997, MHT and *Saath* have participated in implementing a Slum Networking Project (SNP) in Ahmedabad aimed at transforming the physical environment of slums, as well as improving the social and economic lives of slum dwellers. Also known as the *Pari-vartan* (meaning "transformation" in Hindi and Gujarati) project, it aims to provide a package of basic infrastructure services, including household connections for water supply, individual toilets, storm water drainage, solid waste disposal, paved roads, street lights and landscaping. MHT and *Saath* have worked to achieve these objectives through a partnership involving slum communities and their representatives, the community-based organisations (CBOs), the Ahmedabad Municipal Corporation (AMC), and international organisations like the World Bank and USAID. By the summer of 2006, the SNP had reached 35,500 slum dwellers in Ahmedabad with its services. It was awarded the prestigious Dubai International Award for Best Practices to Improve the Living Environment in the same year. Baruah (2007a, 2010) and Kundu and Mahadevia (2002) provide more detailed information about this project, as well as about the history, politics, ideological orientation and governance of the city of Ahmedabad.

In 2001, building upon the successes in the SNP, MHT and *Saath* forged a partnership with the Ahmedabad Electricity Company (AEC), a commercialised public utility, on a slum electrification pilot project. The major objectives of the project were to ensure availability of safe and legal electricity supply to slum communities; to minimise process time for new connections and to organise and operate an efficient bill recovery system; to eliminate unauthorised use of electricity by regularising connections and minimising techno-commercial

losses; to involve slum dwellers in the supply and payment of dues through representative CBOs; and to develop strategies for scaling up the programme at local, state and national levels. By 2008, close to 100,000 homes had been electrified in Gujarat and the programme is being replicated within Gujarat and in the neighbouring state of Rajasthan.

Successful Features, Weaknesses and Broader Policy Implications

Building upon Established Trust in Partnership Approach

The successful implementation of a large multiple-stakeholder water and sanitation-focused Slum Networking Project (SNP) in many Ahmedabad slums seems to have enhanced trust between the slum communities, the municipality and the NGOs. The NGOs' primary responsibility in the SNP was to motivate and mobilise the slum communities to participate in the upgrading process. The NGOs facilitated the formation of registered CBOs to represent residents' interests. The NGOs were also largely responsible for the implementation of the SNP's community development programmes, including community health services, adult literacy and childcare. Baruah (2007a) documents how the NGOs built relationships with slum communities through repeat visits and exposure and dialogue programmes of all stakeholders. The successful delivery of water and sanitation infrastructure in a large number of city slums through the SNP made the motivation and mobilisation for the electrification programme relatively easy to accomplish. The sequencing of the slum electrification programme was critical to its success. Since most slum dwellers understandably prioritised access to water and sewerage over legal electricity, these basic services were provided first. A full 90 per cent of residents in SNP slums expressed a demand for legal electricity after receiving water and sanitation services (Bhatt, 2007). Although full legal tenure—in the form of land titles [*pattas*]—were not offered to any of the slums that were included in the SNP, the 10-year guarantee of non-eviction awarded by the municipality to SNP slums also played a big role in motivating slum residents to invest in legal electricity connections. In the early years of commercialisation of the electricity sector in Ahmedabad, the AEC showed very little interest in serving slum communities with legal electricity. The operations of the AEC were at that time regulated by the 1991 Electricity Laws Act, which stipulated that the Government of Gujarat would bail the AEC out of 50 per cent of revenue losses in its operations (*ibid.*). This Act, which initially ushered in commercialisation and privatisation of the electricity sector, was eventually amended again to require the Government of Gujarat to pick up only 30 per cent of AEC's revenue losses (*ibid.*). After the amendment, the

AEC became motivated to find new customers and also to reduce losses due to theft. Middle- and upper-income residential communities in Ahmedabad are already fully electrified. Slum communities with densely packed homes—served almost exclusively by illegal electricity supplies—presented tremendous opportunities for AEC to scale up its operations to meet the dual objectives of reducing theft losses and increasing revenue. As elsewhere, the commercialisation of electricity in India is situated within a broader paradigm of policy reform since the early 1990s that is focused on market liberalisation. The commercialisation of utilities and the introduction of competitive markets are believed to lead to efficiency gains that can benefit the sector (Hunt, 2002).

Assessment of the Ability to Pay

A primary concern (and a major source of conflict) in slum electrification programmes is the degree to which the household connection fees should be subsidised. It has become accepted practice in slum upgrading programmes—although not without controversy—to require the recipient household to pay part of the connection cost. This is based on the argument that the improvement would be valued more highly if the recipient household had to make an investment (Black, 2008). On the other hand, it is also widely acknowledged that large lump-sum payments can be very onerous, and often impossible, for poor households to manage. Most slum households were able to manage fees best when they could pay smaller sums of money over longer periods of time (McDonald, 2009a; USAID, 2004). Before the pilot project, there was a general assumption within the AEC that slum residents would be unwilling and/or unable to pay for legal electricity connections. A survey was conducted by *Saath* in 500 households in five city slums to estimate slum dwellers' ability to pay. The electricity consumption in legally connected households in slums was typically about 36 kWh per month, which at prevalent tariffs would cost Rs.108 (US \$2.70) per month. Based on conversations with slum dwellers about rates charged by middlemen, it was estimated that the same level of consumption would cost Rs.216 (US \$5.40) per month for an illegal connection—illegal providers typically charge Rs.50 (US\$1.25) per “power point” (light bulb connection), resulting in a payment of Rs.200–300 (US\$5–\$7.50) per month for a household with four to six connections. This amounts to 10–15 per cent of monthly income for a household earning Rs.25,000 (US \$625) a year. The survey assumed that to finance the initial connection costs, the customer would take a loan from a moneylender at a very high interest rate payable over a three-year period. These costs were integrated into the survey to arrive at the monthly repayment schedule. Therefore, the total monthly cost to the customer is the monthly loan repayment plus the average monthly charge for electricity con-

TABLE 1 *Ability to pay for legal electricity services*

Connection fee in Rupees	Monthly instalment payment for connection	Monthly electricity bill	Total monthly cost	Percentage of households able to pay
Rs.1,000	Rs.60	Rs.108	Rs.168	98
Rs.1,500	Rs.91	Rs.108	Rs.199	88
Rs.2,000	Rs.121	Rs.108	Rs.229	84
Rs.2,500	Rs.151	Rs.108	Rs.259	28
Rs.3,000	Rs.181	Rs.108	Rs.289	6

sumption. Although there were wide variations in the ability to pay among the 500 households surveyed, some informative findings emerged from the analysis of this data.

The precipitous drop in ability to pay as the connection fee increases beyond Rs.2,000 (US \$50) indicates a clear guideline for pricing—penetration of legal electricity into slums would be low if initial connection costs exceed Rs.2,000 unless there are subsidies to cover higher amounts. Ahluwalia (2000) estimated that 50 per cent of all households in India (81 million households) are unable to afford commercial rates for electricity. These findings emphasise that if low-income households are to be provided with electricity at affordable rates, there should be no illusions about the continued need for subsidisation and for public funding even in a commercialised and restructured sector (Barnes and Halpern, 2000; Dubash, 2002).

Suitable Tariffs

The establishment of appropriate pricing guidelines for initial connection fees, which were demonstrated quite clearly in the *Saath*-administered survey, were complicated by a claim by AEC—based mostly on anecdotal information—that 40 per cent of slum households were willing and able to pay up to Rs.8,000 (US \$200) in initial connection costs. The NGOs played a crucial role in negotiating pricing policy. The AEC had initially worked out variable pricing from Rs.3,500 (US \$87.50) to Rs.10,000 (US \$250) for different households in slums depending on the distance from the electricity mains. The NGOs convinced AEC to adopt a uniform pricing policy for all households included in the pilot project. The costs for connecting an individual household and installing internal wiring was split between the household which contributed Rs.3,350 (US \$83.75) and USAID and AEC, who each contributed Rs.2,200 (US \$55) per

TABLE 2 *Connection fees: Who pays what?*

Payee	Amount in Rupees
Recipient Household	Rs.3,350
AEC	Rs.2,200
USAID	Rs.2,200
Total Connection Fee	Rs.7,750

household. A total of 820 households in four slums were provided with legal electricity at this price—Rs. 7,750 (US \$193.75)—in the pilot project.

Average revenue losses to AEC in these four slums were reduced from 27 per cent to four per cent after the pilot project (MHT, 2006). Average electricity consumption in these slums rose by 200 per cent per day (*ibid.*). AEC reports that total non-technical losses in slum areas that have been legally electrified are five per cent whereas they are as high as 30 per cent in areas with widely prevalent illegal connections. Following the successful implementation of the pilot project, AEC decided that it would charge a lower uniform price of Rs.5,200 (US \$130)—inclusive of all subsidies—for all new service connections. NGO advocacy in pricing policies for low-income consumers has also indirectly benefited middle-class customers in the state of Gujarat. As AEC became more convinced about the profitability of slum electrification, one-time connection fees were further reduced to Rs.2,300 (US \$57.50) for all new connections. The NGOs are currently working on electrification projects in rural and urban areas of Gujarat in collaboration with private-sector electricity companies and commercialised state electricity boards who have all adopted Rs.2,300 as the standard charge for new connections.

Facilitating Billing Policy Change

AEC issues bimonthly (every two months) bills to mainstream consumers. Because of their low and volatile incomes, most slum residents are unable to pay larger bills for longer periods of time. Most expressed a clear preference for monthly bills. MHT intervened on behalf of slum residents and appealed to AEC to issue monthly bills to low-income consumers. AEC responded to this recommendation by revamping its management information system (MIS) software to facilitate the issuance of monthly bills. At MHT's request, the AEC also set up a special Slum Electrification Cell on its premises to specifically serve economically weaker sections of society and to facilitate the scaling up of the slum electrification programme. While most urban poor households have

found monthly bills affordable thus far, in the future it may be necessary to further refine billing policy to make fortnightly or even weekly bills possible. There have been no reports thus far of households that have been cut off from their electricity supply as a result of non-payment, which also seems to suggest that monthly payments are affordable. Given the volatility of incomes in urban poor households, non-payment may become an issue in the future. Innovative humane solutions will be required to ensure that families do not lose access to legal electricity due to temporary inability to pay. Several researchers have called for less aggressive cost recovery in electricity provision or to an outright end to electricity cut-offs for non-payment of bills by low-income households. Writing about South Africa, McDonald (2009b) states that cut-offs make a mockery of post-apartheid constitutional rights and entitlements to basic services since they serve “only to discipline and cajole potential low-income defaulters into payment in the interests of minimising rates and tariff increases for the middle class and industry.” The issue of non-payment can also become highly politicised. Public and private utilities have used non-payment as a justification for cutting supplies to cover for failures in repair and maintenance, as well as for rerouting supplies (*ibid.*). The pressure felt by many cities to recreate themselves as “world” cities or as tourist destinations leads to changing land values and can motivate municipalities to demolish infrastructure in poor communities (McFarlane, 2010). The countervailing influence of a progressive, vigilant civil society is critical in such environments.-

Although resistance to neoliberalism may emerge at the “grassroots” in other contexts and lead to the creation of more radical socio-political formations, in this particular case in India the institution of microfinance appears to have convinced local communities to buy into rather than resist neoliberal practices. SEWA’s decision to lend only to women can similarly be interpreted as progressive and enlightened or more cynically as just “efficient”—since it is well-known within development circles that poor women are easier to discipline and collect debts from because of their low social status within their families and within society at large. The enthusiasm for providing women with microcredit continues unabated at the moment but it is difficult to determine whether practices and models that “empower” women in deeply individualistic ways will endure in the future (see, Baruah, 2010, for a broader discussion about the contradictions presented by NGO intervention in poor women’s lives).

Establishing a Legal Framework for Slum Electrification

The issue of land tenure looms large in slum electrification programmes. India’s Electricity Act prohibits the electrification of illegally occupied lands. To uphold his law, the AEC followed very strict norms for legal electrification. The

consumer was required to provide what are called 7/12 records (documents demonstrating legal ownership of land), as well as other proofs of residence, such as tariff bills, ration and election cards. Of course, the vast majority of slum dwellers are unable to provide such documentation. MHT and *Saath* lobbied the AEC to find creative ways to meet the requirements of the Electricity Act. They facilitated negotiations between AMC and AEC to find an alternative solution and managed to bring them to a consensus decision after six months. It was decided that a No Objection Certificate (NOC) issued by the AMC stating that the beneficiaries of the SNP would not be evicted by the AMC for a period of 10 years would be used as the support document in lieu of other proofs of ownership and residence. Since such letters could only be provided for slums that had received the SNP infrastructure, the AEC introduced an indemnity bond to specifically undertake electrification in non-SNP slums at a later stage in the project. The indemnity bond basically required slum residents to sign an agreement stating that they would not pursue legal proceedings against AEC if they were evicted from their homes or relocated in the future by the AMC. The combination of NOCs and indemnity bonds provided an adequate legal framework for the provision of legal electricity to slums. The challenges faced by the NGOs in addressing the right-of-way issue in Ahmedabad does point to a need to amend the Electricity Act to allow for the legal electrification of informal settlements in other states in India.

A devastating earthquake hit Gujarat in January 2001 just before the implementation of the pilot project. Many poorly and/or illegally constructed buildings collapsed all over the state during the earthquake. In the aftermath of the earthquake, the High Court ruled that regular electricity connections could only be provided if there was a valid building use permit for construction. This presented another obstacle in the path of the slum electrification project. Since slums residents do not qualify for building use permits, the AEC and AMC assumed that they were also ineligible for legal electricity connections. *Saath* filed a Public Interest Litigation asking the High Court to clarify if the ruling also applied to slum residents. The High Court responded by stating that slums did not require building use permits to access basic services, including legal electricity.

The findings from this research echo those from other contexts (see, for example, Gulyani and Bassett, 2008) that suggest that the “infrastructure first” versus “tenure first” debate in the literature on slum upgrading is not helpful in practice in improving the lives of the urban poor, especially when analysed within the constraints of their lived realities. In their review of slum upgrading projects in sub-Saharan Africa, Gulyani and Bassett (2007) emphasise that efforts to regularise land titles to confer *de jure* security of tenure have not been

encouraging. By contrast, infrastructure investment efforts have conferred *de facto* security of tenure and also ameliorated living conditions. Over time, project-based learning and micro-level innovations have also helped improve upgrading performance. The same authors stress that to create broader and sustainable benefits, upgrading efforts need to be scaled up, preferably through a programmatic approach that is channelled through government, links slums to citywide systems, and combines a community-demand and participation approach with supply-side constraints and rules of access. These findings also hold water in the urban Indian context.

Role of CBOs in Slum Electrification Projects

MHT and *Saath* regrouped the CBOs that had already been formed as part of the SNP for the slum electrification project. The NGOs and the AEC worked with the CBO to identify a member—usually a woman—who was trained to read the individual household meters. AEC then pays the CBO Rs.10 (US \$0.25) per meter read for each billing cycle. The meters are read fortnightly and customers receive monthly bills. The CBO's efforts in collecting electricity dues are complemented by the efforts of *Bank sathis* (friends) who are employed by SEWA Bank to conduct outreach activities in slum communities. *Bank sathis* typically come from slum communities and possess basic literacy and accounting abilities. They offer door-to-door financial services in slum communities. They have also been extremely effective at securing loan repayments. *Bank sathis* do not receive salaries, but they earn commissions based on the volume of business they generate and the repayments they secure. SEWA Bank currently employs more than 75 *bank sathis*. MHT helped identify nearly 27 *bank sathis* in areas served by the SNP and *Ujala Yojana* projects. CBOs assumed the following other responsibilities in the slum electrification project: creating awareness and motivating slum dwellers to access legal electrification; conducting home visits and community meetings to facilitate the same; submitting applications to AEC on behalf of slum residents; and acting as watch dogs against electricity pilferage in slums.

While there are some obvious benefits to be derived from CBO involvement, some caution may also be merited in naively romanticising community participation. Activism in support of collective, community-based forms of resource management can fetishise communities as coherent, relatively equitable social structures, despite the fact that inequitable power relations and resource allocation exist within even highly impoverished communities (Baruah, 2007a; McCarthy, 2005). There is no doubt that the CBOs that participated in this project carried out their duties in a well-organised and efficient manner. However, a closer look at the composition and dynamics of the groups revealed a

few problematic trends. One of the most obvious characteristics of CBOs in all participating communities was the over-representation of women who were related to men in politically powerful positions within the slums. It was more the norm than the exception in almost each case for CBOs to be headed by wives of locally prominent men, such as political organisers, moneylenders and chit fund managers. More marginalised groups like female-headed households were conspicuous in their non-involvement in the CBOs in almost every community included in the research. The poorest and most vulnerable households in slums frequently did not participate in slum upgrading activities (Baruah, 2007a). This is also true of their participation in CBOs. More incentives must be built into the process of organising CBOs to ensure that they do not just represent the voices of the relatively better-off members of slum communities. Nebulous terms like “community participation” can, in practice, be exclusive and regressive or inclusive and progressive, depending on how they are conceptualised and operationalised. In multiple-stakeholder projects that bring together “partners” with very different core philosophies, motivations, working styles, strengths and constraints, urban poor communities and their representative CBOs can easily be co-opted to perform a very limited range of policing and collecting agency services as a proxy for “participation”. Indeed, there is growing concern that civil society engagement in infrastructure provision, through NGO participation, for example, may become just another mechanism for corporatising and commodifying delivery of basic services, by paying lip service to feel-good terms like “participation” (Hall et al., 2005), while continuing to reflect and reproduce urban inequality (McFarlane, 2010). The fact that NGO workers’ salary raises and bonuses are also frequently “performance-based”, i.e. measured by their ability to convince people in slum communities to “buy into” these projects further legitimises neoliberal policies and commodifies social relations.

Strengthening Women’s Entitlements to Land and Housing

Land tax documents and water bills for households that participated in the SNP were issued in the name of the female household head. MHT and *Saath* also advocated for electricity bills to be issued in the names of the female household heads. A wide range of legal, cultural, economic, political and ideological factors influence women’s marginalisation in property ownership in South Asian countries (Baruah, 2007b). Such complexities seem to reinforce that urban land tenure in India is best understood as a multifaceted social and political process, rather than as a system of laws and rules, since it more closely resembles a continuum with many intermediate positions than a dichotomy of what is legal or illegal, formal or informal. A similar analogy can be made for women’s

property rights in urban areas where concretising a woman's right of residence in her home may similarly serve as an intermediary position *en route* to the final destination of the right of independent or joint ownership. While the right of ownership can be established only through the execution of a sale deed on secure land, the right of residence can be strengthened through a variety of mechanisms. Since land ownership in its standard form is still not available to an overwhelming majority of slum populations and the concept of joint titles to urban land and housing is just beginning to gain currency, organisations like MHT and *Saath* attempt to empower women with whatever means available. It is usually more of a matter of "putting women's names" on legal and quasi-legal documents, such as promissory notes, electricity bills, and house and land tax. The best slum dwellers are assured of by way of tenure security at the moment is a ten-year guarantee of non-eviction. The NGOs work within this framework, while advocating for the appropriate policy instruments and legislation at the state and national level. Enhancing women's ability to secure independent or joint titles to urban land and housing is certainly a worthy long-term goal for organisations like SEWA but documents like water and electricity bills also represent a realistic and effective strategy to enable large numbers of women to strengthen their entitlements to landed resources in urban areas. The two strategies do not have to be mutually exclusive.

Sensitisation of Other Stakeholders and Knowledge Sharing

The NGOs played a very strategic role in sensitising the other stakeholders to the ground realities of the lives of the urban poor. For example, MHT convinced AEC not to cut off access to the illegal supplies of electricity in slums until they had laid the cables to install the legal supplies. Through forums such as workshops and seminars organised by MHT and *Saath*, slum residents were able to share the difficulties they faced because of the lack of regular access to electricity. Most revolved around challenges in working at home after sunset, problems children faced with studying and doing their homework, and difficulties in performing household chores. Because the participating slum households already had established relationships with the NGOs, they participated actively in such forums. The NGOs used an informal question-and-answer format to facilitate such sessions, which also made participating in them less intimidating for participating slum families and the CBOs. As a result of such efforts, the partners in the slum electrification programme have worked proactively to ensure that a maximum number of legal electricity connections are provided in the slums of Ahmedabad.

After completion of the pilot project, MHT also organised a series of horizontal learning workshops aimed at sharing the philosophy, process and results of

the *Ujala Yojana* with municipalities, electricity providers and NGOs from other cities in Gujarat and Rajasthan. As evidenced by replication of the programme in new cities, these workshops are effective vehicles for demonstrating the feasibility of multiple-stakeholder electrification projects and sharing learning about them.

Hybrid public-private and multiple-stakeholder models in basic service provision are certainly also emerging in other parts of the world. For example, Gilbert (2007) describes how the water company in Bogota, Colombia, remains in public hands but has increasingly commercialised and subcontracted various functions to the private sector. These models may not be replicable everywhere, but they do demonstrate that commercial practices can be combined with relative efficiency, political autonomy and a commitment to cross-subsidies to create systems that work well for different socio-economic groups. Such cases challenge both neoliberal and anti-liberal thinking because they demonstrate the ability to successfully combine public and private practices.

Water supplies are currently being remunicipalised in many countries. Private companies have acknowledged significant barriers to market expansion in the Global South (Bakker, 2007). In South Africa, for example, Suez was sent back to Paris after its mismanagement of municipal water from 2001 to 2006. Also in South Africa, in April 2008, a major constitutional lawsuit in the Johannesburg High Court resulted in a doubling of free water to 50 litres per person per day and the prohibition of prepayment water meters (Bond and Dugard, 2008). Since water and electricity service provision operate on similar terms, public statements made by senior executives of water firms about high risk and low profitability in supplying the poor (see, for example, Robbins, 2003), as well as well-publicised cancellations of water supply concession contracts in Argentina, Bolivia, Indonesia and the Philippines, to name a few other countries, have certainly also served as deterrents to private-sector driven electrification efforts.

The documentation of context-specific limitations of “electric capitalism” has also led to the renationalisation of the electricity sector in some settings (McDonald, 2009a). In Latin American countries, World Bank studies have shown that the wholesale privatisation of the energy sector has not yielded the intended goals of more efficient high-quality provision of energy services to the whole population. The same studies also emphasise that private outside investors cannot always be found for electricity provision. The increased attention paid to affordability considerations with respect to utility tariffs—partially as a result of the recent acceptance of income and welfare distribution problems as legitimate development concerns—has deterred profit- and rent-seeking foreign investors in the electricity sector (Bayer, 2009).

All of these developments suggest that there will be more public, private and NGO-led innovation in basic service delivery in the future. The confidence in “self-regulating market forces” has certainly declined globally and the idea that a certain amount of re-regulation by the state is necessary is increasingly accepted. However, it is entirely too premature to suggest that such restructuring will lead to radical changes in power relations. Creative readjustments and rearrangements of existing relationships between financial and industrial capital are much more likely than a systemic delegitimisation of neoliberalism.

Future Concerns and Conclusions

Through their combined efforts, MHT and *Saath* have succeeded in making a contribution to slum electrification that few other NGOs in India can lay claim to. Their experience suggests that NGOs can play a very effective role in slum electrification as intermediaries between CBOs, municipalities and utilities. They can assist in developing innovative ways of addressing land tenure issues; devising equitable ways of paying for electricity; improving business processes, including metering, billing, collections and rate-making; dealing with non-payment and theft; and developing information and reporting systems by providing feedback to utilities and municipalities. However, it is important to understand that the NGO role in slum electrification is time-consuming, labour-intensive and expensive. Scaling up and optimising NGO participation in pro-poor electrification activities requires strong state involvement in securing financial resources and developing a policy framework for NGOs to participate in the design and implementation of partnership projects and in the oversight of the electricity reform process in general.

MHT and *Saath* staff identified the absence of policy guidance and financial resources as the biggest impediment for NGO participation in pro-poor electrification projects. In an interview in 2007, Bijal Bhatt, the Coordinator of MHT, emphasised that without a recognised role and legal framework to guide their actions, NGOs are forced to “work in the dark” in electrification projects. The profitability of slum electrification motivated AEC to progressively reduce connection fees for slum households after the completion of the pilot project. However, AEC completely ignored the pricing guidelines of the survey conducted by *Saath* in setting the unconscionably high connection fees in the pilot project. The lack of a recognised role for NGO participation made it easy for the utility to reject *Saath*'s findings and recommendations. Experiences in other countries corroborate that there is much ambivalence about the role of civil society organisations in electricity reform (Wood, 2005). This

ambivalence exists despite the fact that grassroots protests, civil society campaigns and policy critiques are raising concerns about equity and the impact of service changes on the poor, participation in and legitimacy of the reform processes, and the effectiveness of market-based approaches in several countries in the Global South (Bayliss and Hall, 2000; Prayas, 2007; Veriava and Ngwane, 2004; Wamukonya, 2003b). While many private or commercialised utilities welcomed initial NGO involvement in clearing municipal barriers and building community trust, some were uncomfortable with NGOs playing an intermediary role for the indefinite future. In the interview cited previously, Bhatt mentioned that AEC had recently expressed a desire to “go it alone” in the future. The fact that there were no administrative or capacity building funds available to the NGOs to participate in this project—both MHT and *Saath* had to absorb their own project-related costs—only serves to entrench the perception that the role NGOs play in slum electrification is not particularly valuable. Because the AEC staff did not fully appreciate MHT’s role in the slum electrification programme, they were also very unwilling to share credit for the success of the project. During interviews conducted as part of this assessment, many AEC staff openly wondered why it was necessary to involve NGOs at all. The AEC did not share any technical information about electrification with the NGOs, nor did it seek to build NGO staff capacity in any way while implementing the project. The need for state and national level policies on the role of NGOs in electricity reform is urgent.

The conflicts between the different partners in the *Ujala Yojana* slum electrification project are also compounded by the absence of a project-specific Memorandum of Understanding (MOU) that defines the specific roles and responsibilities of each partner. The involvement of partners with such a wide range of ideologies, sizes, structures and experiences underscores the importance of developing such a document. Constructive debate about how specific project challenges can be met can be better encouraged and outputs and consequences of the project more clearly defined when the relationship between the different parties is set in a formal framework. The lack of an MOU causes overlaps in function, weakens accountability, and exacerbates conflict between the partners. Since the partnership concept envisages involvement of partners with different core competences, and since there are plans to scale up the slum electrification programme to cover slums in the entire state, the importance of implementing appropriate legalised institutional structures for defining responsibilities and accountability could not be more pronounced. Experiences of stakeholders in other Indian cities where partnership projects have worked well support the importance of drawing up clear roles and responsibilities for different actors. While describing two decades of experiences and achievements of the

city of Vishakhapatnam in slum upgrading and regularisation, Banerjee (2002) stresses that while it is possible for diverse institutions with different philosophies to work in an integrated way, this does not happen automatically. She goes on to emphasise that the support of the state government is a crucial element in the process, as are clear procedures and mechanisms for institutional development. The establishment of a Special Purpose Vehicle—as an autonomous legal and administrative entity to bring together the parties involved in the partnership project in order to manage the project and share its risks and rewards—would also enhance the credibility and legitimacy of the MOU.

Other scholars have noted (see, for example, Bayer, 2009) that while multiple-stakeholder service delivery initiatives are gaining popularity, few in developing countries and emerging economies know how to design them to distribute benefits and risks proportionately to public and private participants and to draw up the necessary contracts in order to make the ideas work. A significant number of public-private partnerships has been abandoned, been restructured or aborted early. State authorities have to beware of getting into situations where the distribution of risks and the concomitant benefits turns out to be “a privatisation of profits and a socialisation of risks.”

MHT and *Saath* played an indispensable role in the development and implementation of the slum electrification project. While it is unfortunate that they have to “justify” their long-term involvement in the electrification of urban poor communities, it may be incumbent upon them to make their contributions to the success of the project more visible to the different partners and to the development community at large. Collecting, maintaining and analysing quantitative and qualitative data on a regular basis about key factors, such as improved and effective cost recovery, savings to electricity utilities and municipalities due to NGO involvement, income generation for women, etc., will be crucial for “legitimising” and creating a long-term policy role for NGO participation in electrification of urban poor communities. Collaborating with academics and other development professionals to publish findings from such projects in peer-reviewed journals and other key development publications will also strengthen and validate NGO efforts.

Eighty-two per cent of urban India was electrified in 2000 versus only 33 per cent of rural India (Dubash, 2002). The low rate of access in rural areas is due in part to the high per capita costs of remote rural infrastructural development, one of the reasons why countries like South Africa have said they will focus on off-grid, solar electricity in these areas. While endorsing the role that NGOs can play in electricity reform, it is also important to highlight currently neglected issues that multiple-stakeholder electrification projects must engage with in order to be considered truly socially, economically and environmen-

tally accountable. These include: rural electrification, which one can argue has unintentionally become the worst casualty of the reform process; formal sector job losses and associated social costs that result from downsizing public sector electricity utilities; and environmental considerations—most notably the counterintuitive biases towards fossil fuel-based technologies (nearly 80 per cent of current energy generation in India) that electricity reform has, perhaps unintentionally, encouraged. While acknowledging that power sector reform was perhaps inevitable in India, it is also important to debate whether privatisation and commercialisation are the only possible solutions. Are there alternatives, beyond the ones discussed in this paper, which could ensure an efficient sector that also meets poverty alleviation goals and environmental concerns? Since even so-called progressive strategies for basic service provision, like the ones discussed in this paper, are so deeply entrenched in the material and moral inequalities of neoliberal reform, future restructuring seems inevitable and necessary.

In the wake of the economic crisis of 2008, many prominent observers of the global economy have emphasised that the ideologies and practices of free-market capitalism or neoliberalism have been discredited and that a new era of regulatory reform, based on aggressive state intervention to restrain market forces, is dawning (see, for example, Altvater, 2009). The findings from this research suggest that the news of neoliberalism's demise may be greatly exaggerated. Although the ideological crisis of neoliberalism has become obvious, there are also strong neoliberal continuities in India in both the reduced-but-important role of the state and the pragmatic, apolitical service delivery role that an increasing number of civil society institutions now play in many developing countries and emerging economies. The fact that economic growth by itself does not ensure development (defined as a broad-based sustainable improvement in the living standards of the poor) is well established today as is the importance of institution-building and addressing distributional issues. We must continue to apply ourselves on the ground and at the policy level to making urban development more effective and inclusive. Whether what we end up with can be called "post-neoliberal" will probably just be a matter of opinion. To echo Kurt Bayer's (2009) sentiments: "I personally find the value of naming this erosion of some old certainties by any name, be it post-neoliberalism, pragmatism or trial-and-error approach, rather futile. Any -ism would give the appearance of a new theoretical superstructure being in place—which is not the case."

Today, well over 50 per cent of the world's population lives in cities; 75 per cent of the world's population of over nine billion people is projected to live in them by 2050 (UN-Habitat, 2007). Within just over four decades there will be

seven billion people living in the world's cities, 4.75 billion more than in 2007. The overwhelming majority of these people will live in the burgeoning cities and megacities of Asia, Africa and Latin America. More than three decades ago, we were told that we would miss essential aspects of distributional justice and planning power if we studied cities without examining their sewers and power supplies (Bateson, 1978, 249). The political, economic, social and environmental significance of such services can only grow as the world becomes more urban.

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