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# The New Middle-Class, Technology and Modernity in Seelampur

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"In India, Poverty Inspires Technology Workers to Altruism" reads a recent headline from a story in the New York Times<sup>1</sup>. The article reports that "hundreds of multinationals and hundreds of thousands of technology workers who are working here (India) are turning their talents to fight the grinding poverty that surrounds them." This feature story represents the rise of a new kind of middle-class voluntarism among corporate IT workers in India and private-sector new development initiatives through access to Information Technology. Following the Millennium Development Goals outlined by the United Nations (UN) that emphasized access to Information and Communication technologies (ICTs) as a basic socio-economic need, India has emerged as the poster child for development enthusiasts in the South. Since 2004, India has seen a number of public-private partnerships between the Indian state and the IT industry in broader development concerns such as e-governance, education and health (Chakravartty & Sarikakis, 2006).

My paper studies a globally acclaimed experiment in computer literacy and cultural capital in Seelampur, located on the Delhi-Uttar Pradesh state border. In late 2003, Datamation, a prominent private, Delhi based Information Technology firm, with partial funding from UNESCO and the Delhi state government, established computer literacy and e-commerce development projects in Zaffarabad in Seelampur. Seelampur is a diverse community but like the rest of the area, Zaffarabad is largely a settlement of informal working class Muslims. State violence and dominant middle-class interests have historically colluded to create Seelampur. During the National Emergency years in 1975-1977, residents of Seelampur were given small

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http://www.nytimes.com/2007/10/30/technology/30poor.html?ex=1194494400&en=60749aff744c8916&ei=5070&emc=eta1

plots of land in exchange for demolitions of their homes and forced sterilization at the same time that middle-class groups received tax breaks (Tarlo, 2003). Over the decades, the Delhi government has raided and razed homes and businesses in Seelampur, enforcing its policies on slum clearance and recently, its controversial environment laws on closure of several manufacturing industries that are an integral part of the local and national economy.

The Seelampur ICT project is initiated by IT professionals who espouse a spirit of voluntarism and 'social entrepreneurship" to place "technology in the hands of the poor" (Sharma, 2006). The development project, housed in the Babool-Uloom Madrasa in Zaffarabad, is founded on the assumptions that access to information technology would usher in modernity and erase religion, class and gender boundaries. The primary "target group" of the Seelampur project is largely but not exclusively urban poor Muslim women who are considered to be at the margins of the information economy in India. The initiative aims to develop computer literacy and cultural capital among its recipients. Basic computer skills, graphic design related to the tailoring trade in Seelampur, providing access to education and health information and using multimedia to record "naat" and "ghazals" constitute some of the main activities of the project (Sharma, 2006). Datamation also hires some of the women as low-level programmers or data entry staff as part of its "train-and-hire" program. The project has been contested at different times by the Maulana and Seelampur residents who have been skeptical about the practices of middle-class actors although it continues to win several international awards as a showcase of ICT and development.

As part of the global optimism of the potential of Information and Communication

Technologies (ICT) to bring social change to countries of the south, India has been the site of
several technology and development initiatives through the involvement of the state, the

corporate sector and civil society organizations. From the early 1990s, new media technologies have held the promise of rapid entry into a global networked society with its multiple nodes of connection and flows. ICT could be taken to "every Indian village" and India could provide a voice then to inhabitants of 600,000 Indian villages (Garai & Shadrach, 2006). Through internet cafes and small businesses, ICT would encourage villagers to become entrepreneurs and stakeholders in the global economy (Rangaswamy, 2002). E-governance initiatives reinforced the promise of democracy through plans and practices to computerize records, a daunting possibility where records had not existed for years on paper. Health, agriculture, emancipation of women constituted some of the development arenas chalked out for technology led development by state and civil society actors. India became the poster child for ICT for development enthusiasts (Osama, 2006).

Researchers working on ICT and development in India and much of the global south can be broadly classified under two categories. The dominant group of researchers have mainly asked the question of how new technologies can be effectively deployed to bring economic and social change among subaltern groups (Vasudevan, 2006; Prakash & De, 2006; Garai, Atanu & Sardach, 2006; Khochar & Dhanjal, 2005; Kenniston, 2005). This body of research has concentrated on the technological design and "target group" of ICT projects. Their focus has ranged from maximizing the efficiency of technology, developing locally and culturally relevant content, reducing corruption among managers and administrators of e-governance projects and studying ways in which technology changes attitudes and competencies among minority groups. Their methods have included mostly quantitative assessment, open-ended interviews and some ethnographic fieldwork.

The second group of more critical researchers have explored aspects of ICT projects beyond access and efficiency and located such initiatives in the complicated terrain of institutional politics and power (Chakravartty, 2007; Chakravartty & Sarikakis, 2006; Gurumurthy & Singh, 2005; Nair, 2005; Solomon, 2002; Parathasarathy, 2000). They have argued that it is essential to situate development policy and practices in the context of transnational flows of resources, urban geo-politics and the increasing role of the market in providing social services. Gurumurthy and Singh (2005) argue that the development ideology in ICT in India is closely influenced by powerful transnational bodies and involvement of the corporate sector. The Digital Opportunities Task Force (DOT) that recommended policies for countries of the global South in the early 1990s included Northern based NGOs and a strong private sector representation and multinational corporations such as Accenture and international bodies like the UN Development Program (UNDP). The pro-market and pro-competitive framework of DOT Commission and the UN ICT taskforce encouraged private sector participation in technology and development projects in India, drawing from an urban group of professionals. Such professionals form a part of the Indian "new middle-class," in the context of corporate technology culture and globalization. Their identity is allied to their access to education and cultural capital and also to negotiating mobile cultural and transnational spaces. This "new-middle" class is increasingly emerging as paid or voluntary producers of ICT and development projects in India.

My specific concern for this paper is to examine different discourses of ICT for development initiatives and projects in India. To this end, I align my work with critical researchers in asking the question of who controls and manages technology in the quest for modernity and social justice. Specifically, this paper attempts to provide a new theoretical framework for understanding development interventions by focusing not only on the target group and subjects

but on the producers and initiators of ICT experiments namely the Indian new middle-class. In studying a working class community as it interfaces with new technologies and middle-class voluntarism, two interrelated main research questions guide this study that explore the culture of private sector intervention in India and the global institutional context within which it operates. One, what are the beliefs and practices of producers and subjects for the ICT and development initiative in Seelampur? Specifically, how is the voluntarism of the corporate IT middle-class related to their class position and to their understanding of the role of new technology in creating modernity and social change? Second, how are such development/voluntarism activities of the private sector different from earlier state led and NGO development projects, with a focus on the case of Seelampur? I will address each question in turn discussing literature on larger issues of ICT, development and politics in India and the global South.

### **Designing and Evaluating Neutral Technology in Development literature**

Literature that has evaluated the role of ICT in development projects has focused on the digital divide between those who have access and those that lack access to technology. This group of research has studied the efficiency of projects based on the premise that technology will be 'neutral' in leveling economic differences and social divisions related to class, caste and gender. However, development literature in ICT has largely neglected understandings of political processes and questions of power. Broadly, this literature has studied the impact of ICT in attitudes and behavior among project participants (Atanu & Sardach, 2006; Khochar & Dhanjal, 2005), accessibility to technology (Cecchini, 2003; Pentland, Fletcher & Hasan, 2004) transparency and accountability in delivering public service (Khochar & Dhanjal, 2004; Mathur & Ambani, 2005), developing locally relevant content and involving project communities through participatory approaches to development (Kenniston, 2006).

In terms of overall evaluation of ICT development (ICTD) projects in India, many research reports have followed "report card" methods. For example, the private sector consultancy firm Skoch has published an "e-governance report card" that ranks "best practices." from 2002-2005. Skoch's definition of e-governance includes public-private partnerships and ranks successful projects on a number of indicators such as "ease of use," "speed of delivery," "low incidence of errors," "reduction in corruption," "staff behavior" and "staff competence." Similar to the Skoch study, Albert Lobo and Suresh Balakrishnan (2002) conducted a "report card" study for the World Bank, which measured the success of Bhoomi, Karnataka's land records computerization public-private project and the showcase of the development world.

Such report card methods however often miss understanding political and cultural contexts of implementation of ICTD projects. For example, Lobo and Balakrishnan concluded that Bhoomi brought a dramatic decrease in corruption levels among the bureaucratic staff but an ethnographic study conducted by the Indian Institute of Information Studies based on openended interviews found that corruption had actually increased with the complexities of land politics in Karnataka after Bhoomi. Following Ferguson's discussion of development practices (1994), Benjamin (2004) argues that the "success" and "failure" rankings of such report card studies also indicate interests of dominant groups including powerful corporations in the case of a public-private partnership like Bhoomi. The Bhoomi project may be considered a success for bureaucratic and development officials who want to separate land reform from local politics and claims. However, "success" for officials could translate into "failure" for small and medium farmers. Research and evaluation related to ICTD are thus arguably influenced by market research methods of corporate firms and a technocratic understanding of development.

Within the body of ICT and development literature, research on the Seelampur project has mainly explored concerns of access, locally relevant ICT content and "grassroots" involvement of residents of Seelampur (Subramanian, Nair & Sharma, 2006). Researchers on Seelampur assume that access to information technology will lead not only to better employment and income but function as a 'neutral' instrument in erasing class, caste and gender boundaries and create a modern citizen who can participate fully in the market economy and society. Towards that end, they study the development and use of local software and content as a "cornerstone of ICTs for development." (Sharma, 1). For instance, they argue that local software Enrich enables urban poor Muslim women in Seelampur to upload content appropriate to their needs and in local languages. An emphasis on participatory approaches to ICT projects also allows women to use technology for activities such as recording the Koran and music forms like naat and ghazals. Researchers argue that access to technology in Seelampur enables urban poor women to access information related to health, education, vocational training and employment. Project participants are enabled by ICT to work more efficiently with traditional vocations such as tailoring and weaving.

The ICT literature on Seelampur has mainly attempted to study the effects of development projects among women in bringing changes to literacy, education and employment. However, these studies have understood the role of ICT to influence attitudes and behavior among Seelampur women in a context devoid of history and politics. For example, the private firm, Datamation, that initiated the development project in Seelampur, characterizes Seelampur as a "traditional cultural setting." While the Datamation report states that Seelampur "stands out as a pocket of extreme urban poverty and immensely poor living conditions," they attribute this to "cultural settings and tradition." (Sharma, pp. 3). Primarily, they understand religion especially

Islam to be a barrier to education and social advancement of women. ". Traditional customs play an important role especially with respect to gender." (Sharma, pp.3). Corporate new middle-class actors understand the area to be dominated by "traditional practices" such as arts, handicrafts and religious learning.

The ICT project is housed in the Babool-Uloom Madrasa. The Madrasa occupies a central position in Seelampur and is headed by the community leader, the Maulana. The Madrasa houses a school that provides instruction in religious studies for students aspiring to be "Imams," a mosque for gathering of daily prayers and the ICT center. The project developers believe that the Madrasa "isolates itself from the outer world and the teachings have little influence of the outside, changing world." In setting up the technology project, they aspire to demonstrate that cultural beliefs are not a hindrance to the adoption of ICT and the poor can become part of the global village (Sharma, 2005).

If we look at the framing of Seelampur by middle-class corporate initiators, it is worth noting that they neglect to mention Seelampur's thriving manufacturing industries that form part of the backbone of the modern economy. Industries that deal with the production of jeans, iron, timber goods, incenses and lathes provide employment to thousands of people. Cycle rickshaws and "autos" that provide transportation for goods and labor, plastic recycling industries, real-estate and construction agents who lease and sublease space, an extensive tailoring trade that functions alongside with the denim industry and several other "small trades" constitute the busy economy of Seelampur that is far removed from "traditional" crafts and practices although these may be absorbed in other manufacturing trades.

Literature that studies ICT in the developmental context of India has thus mainly focused on questions of efficiency, access and appropriateness of new technology. Major national surveys of

ICTD projects such as the Skoch report card and the Bhoomi survey have been developed on the basis of a deterministic understanding of technology. Such reports have neglected political, economic and social contexts of technology and development projects especially in relation to interests of powerful groups such as the state, corporations and middle-class actors. Within this framework, research on Seelampur has concentrated on adapting technology and content to "local" needs and to measuring behavioral change among its target group of women. However in framing Seelampur as a "traditional" setting, the focus shifts from the modern messy history of Seelampur to individual subjects who must assume personal responsibility and have to be trained to attain progress and modernity. This is a theme that emerges prominently through studies of the new middle-class in the context of neo-liberal reforms and modernization literature in India.

#### **Technology and the Indian New Middle-Class**

In India, recent literature has explored the rise of the new middle-class with the spread of Information and Communication technologies. Descriptively, the Indian new middle-class articulates the hegemony of the ruling block and mediates relationships between those in power and the subaltern or informal working poor who do not possess the same cultural capital in terms of class, caste, gender identities and educational, linguistic skills (Deshpande, 2003; Fernandes & Heller, 2006; Harriss, 2006). Literature on the new middle-class in India has recently focused on the lives of corporate IT professionals in the context of liberalization. Upadhya (2006) argues that the urban, educated middle class that form part of the corporate technology culture has its roots in the mid 1980s era of technological modernization in computers and telecomm services in the reign of Prime Minister Rajiv Gandhi that continued more vigorously through economic liberalization policies of the 1990s.

As a body, the literature on the new-middle class in India has defined the "new' aspects of the middle-class in the following ways. In contrast to the Brahmanical landed gentry, the power of the new middle-class is derived not from land but education and cultural capital (Fernandes, 2007; Fernandes, 2006). Second, the focus of the new middle-class shifts from a preoccupation with state- led development to the market but significantly, from playing a secondary role to a leading one in the market (Fernandes, 2006; Harriss, 2006). A product of this shift is the creation of the consumer as the common public in public discourse and notion of rights that guarantee the rights of the consumer-citizen instead of the worker (Harriss, 2006). In the context of post-liberalization India, the new middle-class identity has been increasingly tied to globalization with regards to creation of mobile personal and professional identities and discursive transnational spaces (Upadhya & Vasavi, 2006). With growing urban inequalities, scholars have argued that the politics of the new middle-class become even more elite in its practices, emphasizing civic participation in neighborhood groups and consumer associations often at the expense of subaltern groups and a pre-occupation with narrow conceptions of economic and environmental concerns (Chakravartty, 2007; Fernandes, 2006; Harriss, 2006; Nair, 2005; Solomon, 2000).

A central feature of the new-middle class that is allied to liberalization policies and the emphasis on cultural capital is that the new middle-class primarily engages in knowledge intensive work (Fernandes, 2006). In the context of deeply unequal effects of globalization in India, one of the most prominent sections of the new middle-class are the professionals employed in the growing IT industry that provides the material basis for an information economy (Fuller & Narasimhan, 2007). In an extensive study of the IT industry carried over two years, Upadhya and Vasavi (2006) explore cultural practices within the industry including

organizational control, work culture and new patterns of sociability and identities including those related to class, caste and gender. They observe that the IT industry emphasizes a new age management system that is supposed to be informal and based on horizontal collaboration instead of bureaucratic hierarchical structures. IT professionals are expected to negotiate different identities as they occupy mobile, transnational spaces. Moreover, the industry claims that it hires people solely on the basis of intellectual and professional "merit." However through their interviews with IT professionals, Upadhya and Vasavi conclude that the "flat" culture of the IT industry has barriers to entry and professional growth. The education system in India privileges upper-class and upper-caste groups and IT industries hire from elite engineering and management schools in India. In terms of gender, there are several barriers for women to be fully incorporated into the culture of IT firms. The IT industry is based on class divisions and the vast majority of the working urban and rural poor are excluded from the industry despite its claim to egalitarian policies.

Upadhya and Vasavi observe that despite outward emphasis on flatter managerial structures in IT firms, values of individualism, self-help and time management are encouraged and rewarded among IT professionals. Taking initiative, working long hours, aggressively pursuing deadlines that advance their "career" leads IT workers to talk about the "rat race" and about doing acts that are considered to be charitable and more meaningful. Companies also often initiated physical and spiritual programs like yoga classes and the Art of Living series. In her book on India's new middle-class, Fernandes (2006) argues that the perceived culture of individualism among this class is allied to discourses of economic liberalization that benefit the new middle-class. The late twentieth century preoccupation with corruption of the state is replaced by the consumer-citizen as the iconic figure of a new, liberalizing India. The feeling

that the state does too much for the poor as part of a socialist mode of development gives way to a belief in the competitive and impartial nature of the market. The result is the production of a civic culture that emphasizes rights of consumers as citizens. The urban poor or the informal working class who continue to relate to the state are excluded from civil society that is stratified through the involvement of the elite middle-class (Harriss, 2007). Activism in civil society becomes an important aspect of "being middle class" and of class aspirations (Harriss, 2007, pp. 12).

Forms of engagement of IT professionals in civic life have been of growing importance to scholars. In her work on the cultural geography of India's high-tech city of Bangalore, Nair (2005) points out that the elite IT workforce and the informal working poor have an unequal and tense relationship, Benjamin (2000) argues that informal economies, although considered inconsequential or as barriers to the growth of an information economy, engage in valuable manufacturing and production activities. In addition to creation of jobs, neighborhoods of urban poor have forms of civil associations that are different from middle-class groups such as collective access to informal credit and finance. In contrast, the new-middle class focuses on narrow concerns such as their neighborhood or consumer protection activities often at the expense of subaltern classes or the urban poor. Specifically in terms of the IT industry, Chakravartty (2007) argues that it is important to understand different kinds of claims made by different groups on the private IT sector and the state on the basis of labor practices, class and caste. While urban new-middle class professionals engage in volunteer activities through NGOs and civil society organizations, their class interests often conflict with the politics of subaltern publics. A case in illustration is the IT industry dismissing the rights to caste-based reservation through claiming merit-based, egalitarian hiring and work policies of IT firms.

Research on the new-middle class in India and the corporate culture of the IT firms has explored identities and politics of the middle-class in the context of globalization and provided ethnographic sketches of private sector, white-collar employees. However few of these studies have explored how cultural identities and normative assumptions about neutral technology among IT professionals manifest in associational life beyond peer organizations such as consumer advocacy groups and neighborhood associations to the new voluntarism that includes the urban working class. As new development initiatives increasingly rely for funding on public-private (corporate) partnerships in India and much of the global south, it becomes important to study these sites of intervention and the interactions between the producers/IT professionals and the subjects of the intervention who are the subaltern classes.

Seelampur provides an interesting case for exploring beliefs and practices of producers for the ICT development project because of the apparent dichotomies that are present in the area. While the public-private partnership aimed to transform Seelampur into a node of the Information Society, manufacturing industries dealing with the production of jeans, iron and timber goods, incenses and lathes were deemed "illegal polluting units" by the state and shut down, resulting in massive loss of livelihood and widespread protests. In her work on slum clearances and environmental issues in Delhi, Baviskar (2003) understands such practices as "bourgeois environmentalism" that benefits middle-class interests to the detriment of the urban poor. The national press represented Seelampur as "lumpen" citizens and "an angry mob" and continued to applaud corporate, middle-class initiatives to transform the area into a technology hub.<sup>2</sup>

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<sup>&</sup>lt;sup>2</sup> Mob fury over Sealing (2006, September 20). Hindustan Times.
Violence marks demolition drive in Seelampur (2006, September 8). The Hindu

According to my interviews in Seelampur in early 2007, private sector volunteers from Datamation identified themselves as "social entrepreneurs" who wanted to "run a NGO with the spirit of a corporation." Although most of them were from Hindu, Brahmanical backgrounds, they claimed that they wanted to work with the historically marginalized Muslim community because of the rampant poverty in Seelampur. Modernizing Islam through ICT was a priority of the producers who understood "tradition" to be closely related to poverty. IT professionals claimed that housing the project in a part of the Madrasa where women have been traditionally prohibited from entering provided a neutral space removed from gender and class divisions. There were fewer narratives of how the women themselves related to the technology in their everyday lives especially in relation to the leveling of social and economic differences. In exploring how producers and subjects understood technology intervention according to their worldviews and positions, it is my aim to shed light on the culture of corporate sector social sector activity in India.

The founder of the Seelampur ICT initiative and the CEO of Datamation, Chetan Sharma, identifies himself as part of the Indian new middle-class. In his personal narrative of his success in the IT industry, Sharma talks about growing up in a poor Brahminical family that lacked access to resources but communicated to him the importance of education. Sharma, in fact, equates his Brahminical upbringing with the ideas of renunciation and charity. He claims that while he struggled to get an education, his degree in business and his work experience in the private sector built a foundation for starting businesses and the importance of profits (Sharma, 2005). According to Sharma, his belief in the market prompted his joining the IT industry. "I lacked the resources for manufacturing, and finance was too routine. I knew I could make it only

in marketing, and I was eager to apply my IT skills." (Makaan 1998.) Sharma also recognized that the IT sector had become the driving force in India's economic development, and in accelerating job and revenue creation (Lookner, 2005).

The narratives about the neutrality of technology in promoting economic and cultural capital among residents in Seelampur however work at different levels and reveal contesting interests of different groups. There are several bargaining and negotiation sessions between the political and religious leader of Seelampur, the Maulana and political workers, Seelampur residents who are subjects for the project, and the producers who are IT private sector professionals. These meetings are held regularly and have been historically embedded in conflicts and negotiations over land use for technology, caste and gender concerns related to access and use of IT and the future of manufacturing industries in the Seelampur area. Different class and caste interests determine perceptions and use of information technology. For the higher class and usually higher caste merchants and small industry owners in Seelampur, the ICT project is a means to get access to more organized women labor force. Women, who are the subjects for the project, learn ICT applications to enhance their existing occupations of tailoring, designing clothes, making handicrafts, candles and henna among other activities. Industry owners and more prosperous merchants in Seelampur support the project because it also gives them the platform to interact with urban, poor working women of Seelampur and benefit commercially through marketing and export activities. This comparatively wealthier group in Seelampur is consisted mostly of male members who hope to acquire economic and social mobility through the ICT project in arguably different ways from other groups. For the Maulana, the political and religious leader of Seelampur, the ICT project brings global recognition to the area that has the potential to enhance his political standing. The Maulana controls access to the Madrasa in which the ICT project is

housed and visitors to Seelampur need to have permission from the Maulana to visit the ICT center. Moreover, the Maulana emerges as a powerful actor in negotiation with the private sector because he has strategically withheld resources from the project. The ICT for development project arguably gives the Maulana the claim to modernity combined with political and patriarchal control of Seelampur, a claim that is supported by the new middle-class corporate actors who see technology as a means of modernizing the area in economic and religious spheres. Sharma, for example, argues that ICT would change Seelampur where "towering minarets of numerous mosques in the area are indicators of the role played by religion and the clergy in the lives of the community (2006)."

In organizing and managing, the ICT initiative, producers also encourage a form of organization that arguably follows elite associative patterns of the new middle-class in consumer and neighborhood associations. Such forms of organization are based on negotiating capabilities of their members. In Seelampur; IT professionals have helped to organize the minority women of the ICT center primarily for bargaining with the community's political and religious leader, the Maulana. Although the Maulana collaborated with Datamation in establishing the learning center, he wanted it to be shut down during the month of Ramadan. The Datamation staff led women to research Ramadan on the internet and "to understand the meaning and significance of the rituals and why Ramadan is observed." (Sharma, 2006, 6). The women used this information to bargain with the Maulana who finally agreed that the center would close an hour earlier during the month of Ramadan. The Datamation staff has however kept its distance from the politics of Seelampur. In their discourse about Seelampur, they have understood the area to be dominated by "traditional restrictions on mobility" and "anti-social elements" with no reference to the violent history and contemporary political realities lived in this resettlement area. They have

equated low family incomes and high density of population with religion and traditional attitudes among residents (Sharma, 2006).

In understanding such forms of civil society organization, it becomes important to differentiate between various forms of activism and agitation according to class positions. In his work on civil and political society, South Asian scholar Partha Chatterjee (2005) argues that civil society is a modern construct, based on a western notion of a public sphere that emphasizes dialogue and negotiation. Political society instead includes forms of politics that operate outside these associative interactions and legal norms such as squatting on public land or stealing electricity. Tarlo (2003) argues that the resettlement colony of Seelampur is formed on a thin line between the "legal" and "illegal." Many original settlers moved out, transferring their land that subsequently exchanged hands several times, through illegal "power of attorney." A primary reason for transfer of land among residents was that they found it difficult to live in spaces allotted to them by the state. Over the years, there have been several instances of "mob-like behavior" involving confrontations between the police and Seelampur residents rooted in enforced demolitions of businesses by the state and middle-class actors. In encouraging women to engage in "rational" behavior, Datamation professionals attempt to shift the emphasis from popular understandings of Seelampur as the "angry mob" to a more reasoned public sphere. However, they ignore power struggles between dominant and subaltern groups and structural concerns in Seelampur related to class, religion and caste that constitute the complicated politics of the area.

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<sup>&</sup>lt;sup>3</sup> Mob fury over Sealing (2006, September 20). Hindustan Times.
Violence marks demolition drive in Seelampur (2006, September 8). The Hindu

The rise of the Indian new middle-class is integral to our understanding of ICT and development projects. The focus of the development literature on ICTD has been on effects and subjects of new media initiatives rather than on producers. As the private sector increasingly becomes an important player in supplementing or even replacing social services of the state, voluntary and paid professionals from corporations are important actors in shaping and deploying these development initiatives. The class positions of these individuals determine ideas of individual success, social mobility and forms of negotiation and politics. In the case of Seelampur, these translate into understanding technology as a neutral instrument in bringing modern and associative forms of organization and steering away from "lumpen" politics. As we shall see in the following section, ICT and development in India is strongly rooted in transnational flows and politics of resources and power that influence technology "nodes" such as Seelampur in Delhi.

#### The Politics of Technology and Development: The Role of the Private Sector

Development through high-technology initiatives in India operates at the intersection of the post-colonial state and transnational alliances. The "corporatization of development" (McLaughlin, 2005) has meant that development policies framed in the North by international agencies and private sector firms are transferred to the South with an emphasis on market frameworks and business models (Gurumurthy & Singh, 2005). The close relationship between the private and public sector in IT is not a recent collaboration but was embedded in the Indian state's policies of fostering economic transformation through its active protection and promotion of the technology industry (Evans, 1993).

Critical scholars writing on ICT in India have contested the view that technology is a neutral instrument of development. Instead of studying design and efficiency of new media initiatives, these scholars have explored the politics of ICTD policies and practices. Their interests have included examining transnational influences on ICTD policy (Gurumurthy & Singh, 2005; Chakravartty & Sarikakis, 2006), urban geo-politics of technology and development (Benjamin, 2004; Nair, 2005; Solomon, 2007) and issues of labor practices, class and caste related to ICT (Chakravartty, 2007; Fernandes & Heller, 2006, Vasavi, 2006; Nair, 2005). These researchers have pointed out that ICT and development in India is often a complicated arena, involving contesting interests of different groups.

Transnational and national alliances influence private sector participation in technology and development projects in India. In 2000, in the Okinawa Charter on Information Societies, G-8 countries proposed a model also for developing countries (Gurumurthy & Singh, 2005). The Digital Opportunities Task Force (DOT) had a strong private sector representation although it included north-based NGOs and some governments from developing countries. The DOT team recommended that national strategies for ICT led development should be based on a procompetitive and pro-market framework along with institutional capacity and regulation. Three members of the DOT commission, including the MNC consulting firm Accenture, the US based non-profit organization Markle Foundation and the UN Development Program (UNDP) wrote a separate report Digital Opportunities Initiative (DOI) which was based on similar principles to the DOT report. The DOI advocated that ICTD initiatives based on the business model were much likely to be sustainable and have a more lasting impact. The UN ICT Taskforce was also led by a business model that was mostly formulated by development experts in the North.

Gurumurthy and Singh (2005) argue that such business models were later questioned by development experts in the World Bank and IMF in the context of the failure of Structural Adjustment Programs and the formulation of Millennium Goals that paid more attention to structural factors. However, ICT was represented as the technocratic, quick solution to structural problems in the South, driven primarily by a piecemeal business model. Such models were also easily adaptable by officials in the South because these found resonance with the private sector orientation of bureaucrats. The rapid technological change enabled MNCs to become leaders in technology policy and application and the traditional development sector in these countries often shunned ICTD because it was perceived as an enemy related to globalization.

The policies of the Indian state also encouraged close collaborations with the private sector. Historically, the Indian state represented technology as the 'temple of modern India" and investments in dams, roads, steel and other industries became a priority of the post-independence, Nehruvian socialist state. Information Technology, however, was different from such forms of technology of the post-colonial state because it created close connections between the state and the private sector in India (Evans, 2000). Starting from the 1970s, the Indian state protected the growth of IT firms by offering them subsidies and monopoly contracts. Based on state protection and India's low cost and high quality resources, the software export market grew almost as fast as the domestic export market leading to the growth of major Indian IT firms such as CMC, Tata Consultancy Systems and Tata Unisys Ltd.

Thus transnational influences and policies of the Indian state contributed to the private sector emerging as a partner with the state in ICT and development initiatives. The "corporatization of development" (McLaughlin, 2005) meant that private sector funding for technology development projects replaced funding previously provided by development agencies. The flow of resources

and investments by corporations such as Cisco, Microsoft, Wipro and Infosys were mainly in software training programs contributing to a neo-Fordist system of vocational education (McLaughlin, 2005). ICTD projects could actually facilitate big businesses to become global competitors at the cost of public subsidies. Consolidated corporate bodies were also able to effectively sideline resistance and economic activities from local groups (Benjamin, 2007).

Thus, the presence of the IT private sector in development activities also arises from its long association with the Indian state. In the ICT for development sphere, corporate funding and partnership have also increasingly influenced civil society activities. For example, India's trade body National Association of Software and Service Companies (NASSCOM) administers and monitors significant funding for NGOs. Datamation, the IT firm that works in Seelampur, has a process of selection for partnering with NGOs in its other development projects. The work of Datamation, the IT company based in Delhi, in Seelampur must be understood in the larger context of private sector involvement in ICTD.

Although it is important to recognize that Datamation does not operate on the global scale like multinationals like Cisco and Microsoft, it does have a broad range of consultancy services in a transnational arena. Datamation's commercial services include management consultancy services for domestic and multinational firms, market research, telemedicine, transcription and call center services. The dual functions of Datamation include acting as a private sector IT consultancy firm and as an active collaborator with state policymakers and analysts in ICTD projects. This positions the firm uneasily between the private and non-profit sector in India. Chetan Sharma, the founder and CEO of Datamation, reiterates, "I realized profits are very important to sustain a business. However, my fundamental belief has been that profits are meant to be used by those who have no access to resources. I want to run a commercially successful venture with the spirit

of a NGO." Sharma argues that the commercial business of Datamation, both in terms of transnational and local portfolios, helps sustain the Seelampur project and other social initiatives.

The entry of a private sector firm like Datamation into the technology and development sphere in India also arguably shapes the ways in which technology is framed and redistributed in the case of Seelampur. The emphasis of the project is on the ICT center that mainly functions as a vocational training center that uses specialized software programs. Software packages have included candle-making, liquid soap, henna application and design, making of soft toys, rag dolls and also working on manufacturing chemical cleaners. Additionally, the ICT center runs special classes in which women bring patterns of embroidery and designs that they work with using design packages. Women are encouraged to look for low-level entry jobs in data entry and programming after their time at the ICT center.

As part of its work in Seelampur, Datamation runs a "train-and-hire" program. Women trained in the ICT center can apply for jobs to Datamation. These jobs are usually entry level jobs and include data entry and basic computer and software applications. Knowledge of English is not a pre-requisite to hiring although English language classes may be offered to women. Although some software training is offered, "trainees are not expected to become programmers." The train-and-hire program has proved to be very cost effective for Datamation (Lookner, 2005). It creates a loyal employee base and prevents attrition of labor. Additionally, it allows consistent hiring over the years at low cost. Periodic training programs and refresher courses for women are conducted and the cost of these programs is supported by the Datamation Foundation's board members and volunteers and thus does not significantly affect the company's cost (Lookner, 2005).

While critics of the "network society" argue that ICT leads to growing feminization of work and thus a more submissive work force (Garnham, 2000), it is important to also understand the contradictory negotiations that are revealed through Datamation's train-and-hire program. Women from urban, poor areas like Seelampur who work in Datamation often do earn more than their occupations in home-based industries although they are employed as cheaper labor who owe their training in ICT to the firm. However, these women also claim access to cultural capital from working in a private-sector office that is located in the capital city, outside the resettlement colony of Seelampur. Working in the IT industry leads women to create more mobile identities. Often, these women in turn volunteer to work with Datamation staff at the ICT center in Seelampur. The access to cultural capital through forming a part of the modern work force is fraught with contesting demands in their everyday lives (Freeman, 2001). For example, women employed by Datamation, claimed that they have a harder time in getting married within the Seelampur community but that this perception is changing as men realize that they bring in a larger income. Their negotiations with gender and class identities are increasingly allied to a transnational, unequal work force that influence public and private spheres of work and home.

In Seelampur, residents are used to experiencing development interventions and social service activities of the state and civil society organizations such as NGOs. As Delhi's largest resettlement colony formed after the National Emergency years, Seelampur has a long and controversial history of state involvement in development activities related to education, health and employment generation. As a site of communal violence both after the anti-Sikh riots in 1984 and the demolition of the Babri Masjid in 1992, Seelampur has also been a site of NGO activity. During informal conversations and interviews, residents framed Datamation as the "Foundation" and spoke about it in similar ways to state activity in the colony. For example, the

Datamation staff. In the process, it also monitors and organizes other record keeping activities of the school including attendance rosters for students and teachers and some book-keeping activities. The firm has kept its distance from the protests over closure of small industries in the area and in working with NGOs in the context of communal violence. However its partnership with the state has led many residents to frame its development activities in a larger institutional framework that understands the "Foundation" to have significant, state-sanctioned presence in the area.

#### Conclusion

There has been a vast literature on the role of ICT in development in India and the global South. This literature has been mainly prescriptive and has focused on the digital divide between those who have access to technology and those who lack access to ICT (Cecchini, 2003; Pentland, Fletcher & Hasan, 2004; Atanu & Sardach, 2006; Khochar & Dhanjal, 2005; Kenniston, 2005). Going beyond questions of access, critical scholars have contested the view that ICT is a neutral instrument of development and social change (Gurumurthy & Singh, 2005; Nair, 2005; Chakravartty & Sarikakis, 2006; Solomon, 2007; Chakravartty, 2007). These scholars have explored the politics of development policies and practices and have argued that this is a complex arena that involves conflicting interests of different groups. There has been comparatively less research on the production and consumption practices related to ICT and development initiatives especially in relation to historical and political contexts. Understandings of "network society" (Castells, 1996) or "digital capitalism" (Mosco, 2004; Schiiller, 1999) have been largely limited to the North. At the World Summit for Information Societies held in Tunis

in 2006, civil society activists and researchers urged for deeper understanding of the politics of emerging Information Societies in the South. My research paper concentrates on the localized case of Seelampur to raise questions about struggles related to new technology and modernity in India and in the larger context of developing countries.

Second, my research contributes to scholarship in the field of media anthropology and cultural studies. Researchers in the south have increasingly studied media practices in relation to everyday life and these studies have usually focused on the creation of modern subjects through state controlled media such as television (Abu-Lughod, 2005; Rajagopal, 2001; Mankekar, 1999). There has been little research on private sector initiatives that use new media technologies as part of modernist IT projects. The relationship between middle-class voluntarism and the subject communities it claims to serve contributes to our understanding of how new media functions as a site of cultural identity and citizenship in the context of unequal global flows of technology and resources.

Third, my paper seeks to understand the politics of development institutions and practices in the south (Escobar, 1995; Mitchell, 2002; Abu-Lughod, 2005; Gupta & Sharma, 2006). There has been comparatively less ethnographic work on the role of the private sector in social service functions that supplement or even replace the role of the state. When the private sector has been studied in relation to technology through fieldwork research, sites of investigation have usually been those of labor practices (Ong, 1987; Freeman, 2001; Sassen, 2001). In addition to looking at IT development projects in terms of creating labor, my paper explores understandings of the corporate sector as an increasingly important player in welfare and development activities in the context of globalization.

The rise of information technology has led to a new industrial revolution that brings a renewed sense of urgency in studying the city. The creation of "technopoles" or cities as sites of high technology manufacturing inhabited by a powerful class of "knowledge workers" (Castells, 1996) has been contested through debates on growing urban inequalities and critiques of modernity (Chatterjee, 2004; Sassen, 2001; Holsten, 2007). There has been comparatively little ethnographic research on technology nodes of the South such as Seelampur and my paper critically advance debates about the city as a site of citizenship for the poor especially in the context of technology and new development initiatives. In discussing broader literature on technology, development and politics in India and the specific case of Seelampur, this paper is a preliminary exploration of research questions that require deeper ethnographic research.

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