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Women at Work and Home: New Technologies and Labor among Minority Women in Seelampur

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Introduction

Located on the eastern border of India's capital city Delhi, Seelampur is a "resettlement colony" formed through the collusion of state violence and elite middle-class interests. Seelampur is a diverse community but it is largely a settlement of informal working class urban Muslims. In late 2003, Datamation, a prominent private, Delhi based Information Technology firm, with partial funding from UNESCO and resources from the local Madrasa established a computer literacy project for young women in Jaffarabad in Seelampur. In 2007, these computer literacy and training programs were further extended under the Gender Resource Center (GRCs) program initiated by the Department of Women and Child Welfare of the National Capital Territory of Delhi. GRCs were initiated as public-private partnerships between the state and civil society organizations. To date, a total of 45 Gender Resource Centers have been established in the Delhi region that function as a common space for providing social welfare services to urban low-income women. These services include adult literacy classes, free health clinics, legal advice counseling, short-term courses on sewing, training to be a beautician, craftwork and computer literacy and multimedia programs.

In Seelampur, the Gender Resource Center is housed in a small building in a neighborhood called Jaffarabad and is primarily accessed by minority Muslim women. Most of these women are from low-income families with an average family size of eight people and monthly incomes that range from \$100-\$250. The GRC space is approximately 700 square feet in size and is located next to several small-scale denim workshops that constitute the largest industry in the Seelampur area, one that has been largely hit by the "sealing drive" or closure policies of the state government that declared many of these units to be "illegal" polluting systems. The GRC building is situated right above a small-scale denim factory that uses computer programs for manufacture although neither the male workers in this unit nor the young women in the GRC computer center know about the other group's computer related activities.

The Seelampur GRC has attracted the most global attention for its acclaimed experiment in Information and Communication Technology for Development (ICTD) program for low-income Muslim minority women. This program aims to impart computer literacy and training to participants. Program producers hope that access to information technology will usher in modernity and lead to employment opportunities for young women. The syllabus for the computer literacy and training classes at the Seelampur GRC is designed by the Delhi state government and is common for all Gender Resource Center programs. The duration of computer training and multimedia classes at the Gender Resource Center at Seelampur is for a period of six months. These classes are held for six days a week and there are five classes for five separate groups with each class lasting for one and half hours in a day. Each group usually includes 10-12 young women mostly from the Seelampur area, between the ages of 18-28 years. The classes are free of cost and the minimum qualification for admission requires women to have passed grade 10 [\[i\]](#)

The ICT section has a total of eight computers that are shared among the women in each class. This syllabus includes programs such as MS Word, design and page layout software like PageMaker and

Dreamweaver, basic languages such as HTML and graphics editor programs like CorelDraw and Photoshop.

This study follows Seelampur women who participate in the ICTD project at the Gender Resource Center from the doorsteps of the ICT center into their everyday lives. This paper explores the impact of new technologies on minority women and work in the resettlement colony of Seelampur and other institutional sites of labor through an extended period of fieldwork observations and interviews. One of the main aims of the Seelampur ICT and development project is to empower minority women to participate with equity in the modern labor force. How does work and participation in the labor force change for Seelampur women after their participation in the new technology and development project?

The study argues that there is a gap between the promises associated with new technologies and resultant actual employment for young women. Learning computers is considered to be necessary in the modern world and a promising means of finding work but computer literacy does not often produce desired employment and changes in everyday lives for Seelampur women. The study further tracks women who have been able to find work after the computer literacy programs in two fields including home-based computer businesses and in the emerging service and retail sector in India. In home-based computer literacy businesses, teaching computers is often integrated with "women's work" at home including taking care of large families and informal work for the manufacturing sector and consequently devalued within the extended family system. Among Seelampur project participants, ticketing and service sector jobs in the Delhi Metro Rail system and private airlines are seen as valuable venues of work but these jobs must be understood in the broader global and institutional context of "pink-collar" work that can place young women in vulnerable positions in the sexual division of labor. Drawing from feminist and critical scholarship on ICTD policies and practice in India and the global south, this article examines gendered shifts and construction of personal and 'professional' identities among young women who are the subjects for ICTD projects in a local community that constantly interacts and interfaces with global concerns and forces.

Literature Review

The Seelampur computer training program has been globally acclaimed as a successful experiment in empowerment for low-income, minority women and has won several international awards. While this article deals with the specific case of Seelampur, such programs must be understood in the context of new development initiatives that emphasize 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). Studies that have evaluated the role of ICT in development projects have largely focused on the digital divide and on questions of access and efficiency related to technology. This literature has studied the impact of ICT in attitudes and behavior among project participants (Garai & Sardach, 2006; Khochar & Dhanjal, 2005), accessibility to technology in regards to markets and education (Cecchini, 2002), transparency and accountability in delivering public service (Khochar & Dhanjal, 2005), developing locally relevant content and involving project communities through participatory approaches to development (Kenniston, 2002). 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 have argued 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 (Subramanian, Nair and Sharma, 2006).

Writing about the "network society," scholars have argued that ICTs create more participatory societies and horizontal networks instead of reinforcing hierarchical structures (Castells, 1996). There is increasingly optimism that ICTs would provide unprecedented economic and social opportunities to women that will help them to participate in the labor force in more equitable ways (Gajjala, 2002; Ng and Mitter, 2005; Sharma, 2003). Exploring emerging information societies in the global South, feminist and critical scholars have however argued that ICT should not be only used as a tool and development initiatives should not simply seek to engage women with ICTs. Rather, activists and feminists must engage in critical responses to such information societies in the context of growing inequalities (Gurumurthy & Singh, 2005). The information society continues to be deeply divided on the lines of gender, class and caste in India (Chakravartty, 2007; Upadhyya & Vasavi, 2006).

In terms of labor, feminist scholars have argued that technology has historically enabled the reproduction and reinforcement of gender hierarchies in the global north. Focusing on consumption practices, Cowan (1985) argues that the invention of new labor saving "household devices" actually placed the pressure of unrelieved household labor more on the woman. Tracing the history of the printing industry, Cockburn (1983) argues that the printing industry isolated women by male-centered rituals and lengthy apprenticeship. In the contemporary context, computerized printing threatens masculine control and Cockburn remains more optimistic about breaking rigid gender hierarchies and the emergence of a larger class consciousness enabled by new technology. However as women increasingly enter an ICT aided workforce; several studies have focused on the contested impact of new technologies on women and feminization of work in the high-technology industry in India and the global south (Freeman, 2000; Fuller & Narasimhan, 2007; Mitter & Rowbotham, 1995; Upadhyya and Vasavi, 2006.). Researchers argue that although ICTs can lead to employment and work opportunities for women, technology can reinforce and reproduce structural inequalities in certain cases (Arun & Arun, 2002). Writing about the software industry in India, Mukherjee (2008) argues that the IT industry leads to a heightened sense of alienation among its workers connected with socially sanctioned gender norms within a larger global capitalist system. For example, the notion of flexible hours and work at the IT workplace is often a gendered concept embedded in the secondary status of women in the formal labor force. Vasavi (2008) importantly focuses on the youth workforce in the ITES industry and their lifestyles and positioning within an aggressive service economy that prizes youth, appearances and poise. Women are considered to be the natural choice of employees in such an industry and more amenable to courtesy, communication and other 'soft skills.'

In their research on ICT, women and work in India, scholars have usually explored the political economy and cultural identities related to the IT and ITES industries among high-income groups in the software industry and India's growing middle-class such as youth employees in call centers. As India increasingly becomes a popular site of ICT and development projects among women in the south, fewer ethnographic studies have followed low-income, minority women who are the subjects of such experiments into their everyday lives and sites of labor after participating in these projects. Seelampur is an urban working-class Muslim area but development practitioners and project leaders, in interviews, understand the area as a "traditional cultural setting" and Islam as a major barrier to education and progress among women. Prevalent work practices in the area such as sewing, embroidery and handicrafts were seen as gendered traditional practices that needed to be modernized. In a national Muslim Women Survey conducted in 2004, feminist scholars Zoya Hasan and Ritu Menon conclude that the All-India Standard of Living and Socio-Economic Status (SLI) is lower for Muslims, below that of the Hindu lower castes and significantly less than that of the Hindu upper castes. Hasan and Menon (2004) argue that the category of "Muslim women" is often a monolithic label that conceals the trinity of being poor, of being women and of being a religious minority in India. The project participants of the ICTD project in Seelampur belong to such a community of "Muslim women" as understood by policy makers and development experts, many whom have been forced to live on the outskirts of the city of Delhi because of state housing policies, that have largely favored more elite urban groups.

During the National Emergency years in 1975-1977^[ii], residents of Seelampur were given small plots of land in exchange for demolition of their homes and forced sterilization, at the same time that middle-class groups received tax breaks (Tarlo, 2003). Seelampur has a long and controversial history of state involvement in development activities related to education, health and employment generation. It was a site of communal violence both after the anti-Sikh riots in 1984 and the demolition of the Babri Masjid in 1992^[iii] and the area is considered to be "dangerous" by elite South Delhi residents. 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 in the area. Industries dealing with the production of jeans, iron and timber goods were deemed "illegal polluting units" by the state and shut down, resulting in massive loss of livelihood and widespread protests. The national press has consistently represented Seelampur as "lumpen" citizens and "an angry mob" and applauded state and private-sector efforts to transform the area into a technology hub (Hindustan Times, 2006). 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. In my conversations with residents of Seelampur, many of them stated that they understood pollution concerns in the rapidly expanding city of Delhi but felt their livelihoods had been unfairly targeted with the closure of many industrial units in the area without adequate planning or compensation while upper-middle class residents of Delhi benefited from working at multinational companies, rapidly bought multiple cars that contributed to pollution, and avoided taxes.

Method

I conducted ethnographic research for my doctoral dissertation over a period of nine months, from September 2008-May 2009, in Seelampur and Delhi on the urban politics of ICT and development in the context of globalization. This article draws from field material that includes participant observations and open-ended interviews, gathered from this extended period of field research.

Prior to starting extended fieldwork in Seelampur, I had been in contact with producers of the project at Datamation Foundation and made two short trips to Seelampur in 2007-2008, conducting participant observation and informal interviews at that time. Writing about the importance of ethnographic research in evaluating ICTD projects, Parthasarathy and Srinivasan (2006) argue that ethnographic research includes a sustained period of interaction with participants which may inspire more trust, reciprocity and sharing of everyday experiences. Importantly, these sustained field interactions help to understand power dynamics and contestations within which such projects are inevitably embedded.

During the period of nine months in Seelampur, I engaged in unobtrusive participant observation, open-ended interviews and document research at the ICT center as well as at other spaces of everyday life such as denim production units, streets, markets and people's homes. Following critical and feminist approaches to ethnography (Abu-Lughod, 2005; Mankekar, 1999; Tsing, 2004), I sought to not only follow dominant, public narratives but also to uncover gaps, fissures and silences in popular narratives of technology and modernization through oral narratives, open-ended interviews and field observations in Seelampur. In order to mediate the gap between the anthropological self and the "other," I spent a lot of time in the first two months being present at the center and chatting with the women who came there on a daily basis.

Over the course of my field study in Seelampur, I conducted thirty open-ended interviews with young women who participated in the ICTD project. The ICTD project attracts approximately fifty women to register for classes and I selected to interview thirty women on the basis of their attendance in classes and everyday presence at the center. Following the Institutional Review Board protocol, names of participants have been modified to protect their trust and confidentiality. These interviews were done in everyday settings such as the space of the ICT center where participants spent much of their time; at sites of informal work that included a room in their houses reserved for tailoring or teaching computers; or extended conversations at their homes sometimes in the

presence of other family members. Our conversations were often co-constructed with the help of my interview protocol. In a couple of instances, women suggested doing group discussions so that they could see peers participate and hear their viewpoints. This group discussion enabled me to track and interview women who had graduated from the ICT center and were formally and informally employed, including Samina, Gulista, Bano and Farida who are discussed in this article. Additionally, I conducted nine open-ended interviews with project producers at Datamation Foundation, project staff at the ICT center that included the instructor for the ICT classes and the religious head of the Seelampur community, the chief Maulana of Seelampur. The Maulana had collaborated with Datamation Foundation in 2003 to start similar ICT classes in the religious school and mosque, the Madrasa, and the Foundation had left the running of those classes to the Maulana and started a separate ICTD program with state collaboration. He continued to be an important voice in Seelampur about ICT training and women.

A large part of my time in Seelampur was spent on unobtrusive participation at the ICT center and at other spaces of work and home. The front desk in the center was a major activity hub to observe its daily activities and also an informal space that different women used to convene, drink tea and chat. I was also present as an observer in many computer classes, often positioning myself at the back of the small class and taking notes like other women there

As I worked and participated in activities in Seelampur, I increasingly became aware that I could not limit my research on new media, development and gender within the geographical boundaries of the area. I met men in Seelampur who had lost small-scale manufacturing jobs that they attributed to the influx of cheaper, finished products in the market in the context of globalization. As many young women increasingly talked to me about the glamour of jobs in the Indian service industry that included the Delhi Metro rail and the Indian airline industry, I realized that I needed to pursue the web of connections of which Seelampur inevitably formed a part. Anthropologist Anna Tsing (2004) argues for the usefulness of "patchwork fieldwork" that includes incommensurable interviews, different spaces, varied sources, and odd connections that focus on question of distress and conflict in order to understand social projects in the light of globalization. Following the work of critical and feminist ethnographers of globalization in practice, my research seeks to study localized practices and struggles around urban high-tech development through multi-sited ethnography (Ferguson, 2006; Tsing, 2004; Yudice, 2003). In extending my fieldwork out of Seelampur, I simultaneously conducted interviews with state officials and training "experts" and supervisors in the service industry that employed these women including the Delhi Metro Corporation and training schools that were popular among young women after the ICTD program. In order to locate these conversations within a larger discourse of technology and modernization, I also followed popular debates about the service industry and labor in India through prominent national English language newspapers that included the Hindu and the Times of India.

Extensive field notes, interviews and media reports were placed into categories and then codes through several sessions of close reading (Lindlof & Taylor, 2002). Following Goodall (2000), I asked a series of questions that focused on *what is going on* in the communicative exchanges between different participants in the field that enacted multiple constructions of meaning and identity. These questions included – Who is speaking? What is the frame or context? Who other than the main participant is present in this exchange? What is being spoken and how is it said? What are the silences, odd moments and personal and political histories that are being invoked? These analytical resources helped me discover codes, connections between different categories present in my ethnographic material. For example, several participants spoke and understood "work" and "home" not as two separate categories but as the same one in the context of home-based computer literacy businesses. Similarly, participants overwhelmingly talked about learning computers in a more scripted manner that emphasized that computers were the best option for gaining employment in the modern world but remained hesitant about their future options. Although many women talked with great excitement of the glamour of working in an air-conditioned ticketing office, several exchanges with them over the course of time invoked ellipses and odd moments that indicated the grueling and gendered nature of such labor. These references to the unstable nature of work in the

Indian service industry led me to follow up our conversations with tracking media reports that helped place such references in a larger political and global context.

Findings

The gap between the promise and the reality

During interviews, ICTD project producers and staff understood computer literacy classes to fulfill a number of functions that included enabling women to gain a basic knowledge of computers and multimedia that they could use to find employment or take other advanced courses. Self-confidence, learning better English and comfort with technology were considered to be some of the desirable outcomes of the computer course for young women. The main project coordinator at Datamation and two staff members emphasized that the computer classes fulfill the important function of constituting a neutral, safe space for young low-income women to come together irrespective of divisions of class, caste and gender. In different conversations with the ICT class instructor and project staff, they asserted that participants are finally responsible for their own progress and need to work hard, be competent and sufficiently motivated. While other manufacturing trades in Seelampur like furniture-making could have been in a family for several generations, project leaders and some Seelampur women told me that they believe that new technologies are individually learnt and enable minority women to break out of rigid class and caste boundaries.

The young women who come to the ICT center in Seelampur overwhelmingly had a primary objective in mind. They wanted to find formal employment after the six-month computer program. Arshad who is the computer instructor at the ICT center said, "Most girls who come to do the computer course have two objectives. They either want to start something in their own homes or they want to find a job outside." Arshad was optimistic about the jobs following ICT training for young women at Seelampur and that they could easily find jobs as teachers, trainers and in the ticketing and retail industry in Delhi. The women who were subjects for the project were also empathetic in their belief that the computer course would help them to find employment in the organized sector. In our extended conversations and visiting them at their homes over a period of time, I found that many of them worked from their homes in Seelampur, taking on tailoring jobs and working long hours with very little pay to supplement the main industry of Seelampur constituted of denim factories that exclusively employed men as part of their formal labor force. Several of these women had fathers and brothers who were employed in small-scale manufacturing trades such as furniture-making, manufacturing automobile parts and iron-welding and such men were victims of the decline of these manufacturing trades in recent years and the state sponsored closure of "illegal polluting units" in Seelampur without adequate compensation.

To provide a richer picture of the Seelampur women who participate in the ICTD project, it is useful to present a couple of brief ethnographic life sketches of two women who came regularly to the center and participated in its activities. These sketches are constructed from participant observations, open-ended interviews and informal conversations. Shabnam was a twenty-six year old woman who came to the ICT class every day. She also volunteered for other social welfare activities of the Gender Resource Center such as helping to organize free clinics and giving information about state-sponsored social welfare schemes to Seelampur residents. Shabnam had finished high-school and worked as a nurse for six years at a small privately owned hospital in the area. She finally left the job because the hospital changed its policies and asked her to work night shifts that her father strongly opposed. Besides that, she felt unsafe about working at nights with very few women staff around. She got 500 rupees a month or approximately \$10 while working at this hospital. Her fathers and brothers worked at a family-owned business that makes eyeglasses in the old city. Shabnam felt the responsibility to contribute to the family income especially since she said that the business had lost out to the bigger chains and money was very scarce. Shabnam had been looking for a job for the last three years and has felt discriminated applying as a young Muslim woman for secretarial jobs. For Shabnam, learning computers promised a better future:

Everything needs computers these days. I hope I can get a professional job based on my hard work and knowledge from this course, one that is different from my previous jobs. In the center we are often told that there is no caste or religion involved in learning computers. That is all I constantly have on my mind, the need for me to earn some money somehow.

Mehnaz was a twenty-two year old woman who also came to the ICT center daily. Her husband divorced her a year ago through an agreement that was negotiated with the help of the Seelampur religious leader, the Maulana. Mehnaz told me that she got a few pieces of her jewelry back but no alimony payments from her former husband. She came back home to live with her parents in Seelampur with her two young children. Mehnaz's father worked in the denim industry in the area. She signed up for the free computer class because it seemed like that was her best option to start earning money soon. She had heard that the staff at the Gender Resource Center had connections with schools and offices in the area and hoped to find a computer-based job after completing her six-month program.

Although the six-month computer classes at Seelampur aim to teach participants more complex software like Dreamweaver and Corel Draw, they finally function more as an introduction to the basic parts of a computer for example, learning what is a keyboard or a mouse, the Microsoft Office package and Paint. During participant observation at several computer classes, I found that participants also worked with Photoshop and enjoyed playing with images of popular Bollywood stars. They experimented with changing the hair color, hair style and clothes of popular Bollywood heroines like Aishwarya Rai and the superstar Sharukh Khan. The class included theoretical lessons on programs like Dream Weaver and Corel Draw but participants worked less with these design layout and graphics editor programs in their practicum time when they had more unstructured time with computers. The ICT instructor also mainly encouraged a basic familiarity with computers, learning to type on the keyboard and using Microsoft office tools. Through their use of Photoshop, participants also designed and printed posters for home-based businesses for family and friends that included tailoring and beautician small businesses.

Most young women who come to the ICT center had similar expectations from the computer training program as Shabnam and Mehnaz. However, there is often a significant difference between their expectations and the promise embedded in computer training and the reality that follows after the program. All thirty women who I formally interviewed said that they hoped to get a job after completing the program and spoke in general terms about places that could offer them employment such as offices, malls and metro stations. When asked if they knew women from previous years who had got jobs, they either did not know who had been successful in finding employment or reiterated a few familiar names of former students who had found work in the retail sector or had started computer classes in their homes. The computer staff also did not have clear numbers on employment although they quoted a few success stories. I was able to track eight women following leads from participants and ICT center staff, who had found formal and informal employment from the previous five class groups that had a total of fifty women approximately. Four of these women had started home-based computer businesses, two of them had jobs at malls and two of them had gained employment as customer and ticketing agents at the Delhi Metro stations. These women said that the Seelampur ICT class had given them basic familiarity and confidence with computers and this knowledge had given them an edge in getting front-desk jobs at stores in Delhi's rapidly growing malls, the foundation to learn ticketing programs in the short training period at the Delhi Metro, and the ability to start home-based computer classes for other young people in the Seelampur area. None of the women I interviewed had got employment in jobs that required more advanced software skills. However, some of them spoke about their desire to enroll in private computer training schools that taught programming and software skills more intensively but charged the high fees of Rs. 25,000 or approximately \$500 for a six-month program that most Seelampur women could not afford.

Towards the end of my fieldwork research in Seelampur, Shabnam had finished her ICT course and had been looking for employment for four months. She said to me, "We do not set a target and

have realistic expectations. I still think learning computers is important but we were learning computers thinking that there is something out there for us.”

Mehnaz had started looking for jobs as a computer trainer in small schools in the area and in retail stores but had yet to find employment. Project leaders recognize the challenges that women face after completing the course but cite individual initiative and talent as key factors. Nevertheless given that ICT has increasingly been recognized as an emancipating technology for women in terms of labor and work opportunities both among researchers and practitioners, it is important that we seriously take into consideration structural constraints associated with the reality of new technologies and work for low-income young women. Women who teach new technologies within their homes become part of the existing informal economy in Seelampur and are not adequately valued for this work. Those project participants who work in the service industry in India face challenges associated with their place in the global and sexual division of labor. The article further follows some stories from the doorsteps of the ICT center to homes and to workplaces to explore the daily lives of women who are a part of the globally acclaimed experiment in computer literacy and development in Seelampur.

Home-based computer businesses and women's work

In Seelampur, there exists an extensive informal economy of work among women that is often concealed behind the closed doors of homes and subordinated in the sexual division of labor. Sewing, embroidering, giving private tuitions at home, making food such as pickles and chocolates for sale and working with accessories in the denim industry are a few of the home-based occupations among women in the area. Besides these small home-based businesses, women also significantly contribute to small-scale family businesses through informal activities such as managing accounts and keeping records. Finally there is work done by women outside the sphere of the market that includes daily labor involved with taking care of large extended that has been neglected by traditional political economy and national statistics.

One of the main aims of the Seelampur experiment has been to encourage minority women to leave their homes to come to the ICT center and to gain access to work opportunities beyond the space of their homes. The Seelampur initiative has been hopeful of providing a means for women to be included as part of the formal and organized workforce and one of the continuing efforts of this project is to network participants with local businesses in the area. Staff members also recognize that many women also come to the ICT center because they hope that learning computers will allow them to conduct small computer literacy classes from their own homes since for many in the extended patriarchal families stepping outside of Seelampur to work is not considered “safe”.

The Maulana of Seelampur is the religious leader of the area who supervises the Madrasa which is the residential school for religious learning and acts as an arbitrator in disputes related to property and divorce. The present Maulana of Seelampur is well-regarded in the community for his initiative in 2003 to start computer classes in the Madrasa for young women in collaboration with the Datamation Foundation. The ICT classes in the Madrasa are now run through the Maulana's own funds and a small fee from the students. The computer classes in the Gender Resource Center are free and are occasionally perceived as competition by the Maulana. The Maulana's views and sanctions on young women and education are important to members of the Seelampur community. When I interviewed him, he asserted that computer classes have important functions in educating young women to keep up with the modern world and to find employment but argued that computer-enabled jobs at the mall or the metro station are not desirable for young women:

Women are like gold. I do not like the environment of shopping malls and public

metro stations. The dignity of the women is not kept in these places. For me, the main benefit of learning computers for women is that they can keep purdah, open a computer center in their own home and in fact make much more money than working outside.

While computer training does enable young women to work from their homes, the actual context and conditions of this work are different from the Maulana's more optimistic account. After finishing the ICT course, some project participants usually teach computer literacy and basic programs from their homes. As part of my field research, I interviewed and interacted closely with two sisters who had started home-based computer classes and were regarded among the success stories in the ICT center. Samina and Gulista had set up a small home-based computer literacy class in Seelampur after graduating from the ICT program. Both sisters were already privately teaching thirty-five after-school students at their own home, who were enrolled in grades 1-10. Samina and Gulista collectively earned around 3000 rupees or \$80 a month from their tuition lessons that included Mathematics, Hindi and English. When the sisters finished the ICT program at the Gender Resource Center, they bought a computer unit with their savings. Initially they had planned to use the computer to practice their own skills but one of their students suggested that the sisters could give him private computer lessons. At the end of my field study in 2009, the two women had a total of three computer students ranging from the ages 10-15 and gave them basic lessons such as learning to use Notepad, Paint and MS Office. Their students were mostly young boys, aged ten to thirteen years, who wanted to get familiar with computers before enrolling in private computer schools or the state-sponsored Industrial Training Institutes. The fees that these women received in return for their teaching was 100-150 rupees or approximately \$3 from each student, which is significantly less than the women who work in retail or metro station jobs.

Male family members who work outside the home often disregarded such computer-based labor as leisure time occupations for young women before marriage. In the case of Samina and Gulista, such work was subsumed in the informal economy of the home that included daily cooking, cleaning and child-rearing work in addition to home-based occupations such as working with denim accessories to supplement the main industry in Seelampur. They said that their elder brother was supportive of their teaching computers but he thought that this work was similar to their working with denim accessories since both are done in the privacy of their homes and between household chores. Although the sisters contributed to the household income, he saw teaching computers at home as "women's work" similar to their work with denim accessories at home, which is poorly paid work that supports the jeans production units in Seelampur. The sisters talked about how their brother sought their help in downloading games and music on his cell phone but had yet to learn Paint and Word that other family members had picked up and which would help him in his work as a furniture-maker. In conclusion, learning computers at the state-funded ICT center and teaching computer classes within the space of the home is often perceived as an extension of household labor and consequently devalued and challenged within the extended patriarchal family. Gendered roles, norms and practices within the household shape and affect the outcome of ICT-based development.

The cycle of pink-collar work

Pink-collar or service sector jobs that include working as shop assistants in malls, secretarial jobs in offices and in ticketing and the tourism industry are coveted as "clean," well-paying jobs by several ICTD project participants in Seelampur. Ticketing and sales jobs in the airline industry and in Delhi's Metro Rail services are especially desired forms of employment because they are considered to be "safe" and relatively well-paying jobs for women. As Delhi gets ready to host the Commonwealth Games in 2010, state government and the private sector have been vastly optimistic that the event would lead to tens of thousands of service sector jobs being created in the city (Borthakur, 2009).

In Seelampur, the cycle of finding a pink-collar job after ICT training at the center is often a complex one, involving intermediate institutional and private-sector players in the market. After the six-month basic computer training program, many women stated during interviews that they felt the need to enroll in a private computer training institute to get more advanced and rigorous training that would facilitate employment but the fees there are exorbitant and start at \$100 a month. During

the course of my fieldwork, I followed three young Seelampur women, Bano, Farida and Rahina, from the doorsteps of the ICT center to their experiences with private training institutes and service sector jobs. This section is based on ethnographic observations and interviews with different institutional actors including faculty and staff at private training institutes and officials at the Delhi Metro Corporation in addition to the ICT center women. To locate this section in the broader political context, I also draw from media debates about the service industry in India within which the Seelampur women are inextricably embedded.

Bano and Farida, who were twenty-one-year-old women at the ICT center, told me during open-ended interviews that Bano's brother had passed on information about the Institute of Airlines in Delhi that trained young men and women for a career in the airline and ticketing industry and promised success in finding jobs after graduation. Both women felt that their training at the ICT center and the sense of self-confidence that it had given them had been important for their performance in the admission test and interview at the Institute of Airlines. They paid Rs. 5000 or about \$100 as a fee for the admission test and were later told that they would have to pay Rs. 34,000 or about \$700 for the one-year program. For both Bano and Farida, their average family income is about Rs. 7000 or about \$120 a month and they could not afford the Institute's high fees. They told me that they were looking at possibilities to raise money to enroll in this institute as they felt it promised better futures for themselves and their families.

To understand these women's struggle with professional training and work, I interviewed the Director at the Institute of Airlines on site at the school. On its website, this privately-run school states that students are taught to prepare cost-effective travel packages, calculate and quote airfares, complete international travel documents and deal with customers at the front-desk. In the interview, the Director said that the institute has a special interest in "imparting knowledge and training people from the interiors of India who are not updated with modern traditions and empowering the Indian economy with skilled manpower for industry purposes." Learning appropriate computer programs was an integral part of the ticketing course and students at the Institute of Airlines also learnt appropriate email writing and preparing reports and presentations through using technology. "Soft skills" classes included personality development, communication modules and English language classes for all students. The institute did not want to disclose all its recruitment strategies but claimed to rely on internet advertising, word of mouth and presentations in public schools to attract students. The Director asserted that jobs were not guaranteed after graduation but it was very easy for student to get jobs, citing the growing tourism industry in India, outsourcing work for major airlines and the increasing trend in private-sector companies to hire travel advisors.

Faculty members at the Institute of Airlines usually work in the ticketing and airline industry in India. The Director of the Institute estimates the fees to be Rs. 15,000-Rs.20,000 or \$300-400 a year depending on the family income of the student and says that many faculty members teach for free at the institute and in fact, donate their salaries from their regular jobs to subsidize low-income students:

If a student has potential, fees are not the problem. Many students are here without paying fees. Many people who teach here are well-settled. They want to share knowledge. I work with one of the leading airline consolidators in North America as a team leader in the ticketing department. I work elsewhere so that I can give my salary here. Some management people in the institute are paying for the students and not taking salaries. We provide a lot of concessions for students.

Although the institute currently has many more male students than women, the Director emphasizes the need to attract young women to the courses held there:

Girls are beauty. Girls are good sales agents. Most of the time, you are dealing with a male customer in the industry. Girls have sweet voices and they know how to deal with difficult customers. With

the way the tourism and service industry has been growing in India, getting a job is not a problem at all.

Bano and Farida were attracted to the Institute of Airlines by its glossy brochures and advertisements that promised a comparatively short program and salaries in the service industry that started from around \$80 a month. There was however, a discrepancy in their accounts of the policies and the fees of the institute and the narratives of the Director and faculty members. The Institute had quoted annual fees of Rs. 34,000 to the two women which was almost double the amount quoted by the Director in his interview. Although both young women were from low-income families, the institute had not yet offered them any compensation. However, Bano and Farida had been told that they could delay their admission for a month if they were unable to raise the money. Their families were enthusiastic about them joining the Institute and were looking for ways to borrow the money to send them. Several banks had already refused them because the families cannot show that they have sufficient collateral to be eligible for loans. The young women are still following opportunities for borrowing money including considering borrowing from local moneylenders in the area at high rates of interest.

The tensions between the narratives of the management and faculty at the institute and those of the young women at Seelampur must be understood in a larger contemporary global context of the contradictions in the travel and service industry in India. With the comparatively new entry of private players in the industry, India has seen a burgeoning of privately-run schools for training young women as flight attendants and for careers in the ticketing industry. Like the Institute of Airlines, these schools project optimism about the aviation industry including billion dollar investments in the next few years, the creation of hundreds of thousands of jobs and the current severe shortfall in trained personnel in the industry. This sense of hopefulness is however at odds with growing reports on the airline industry of mounting losses and debts due to over-expansion in India, the cost of fuel prices and the recent global economic crisis (Business Times, 2009; Katakam, 2008). In October 2008, the leading Jet Airways announced its decision to lay-off more than 1000 employees, a move that generated demonstrations and protests by employees many of whom were young women. Some of these young women, who were mostly cabin crew, claimed that they were from low-income families and had taken thousands of rupees in loans to enroll in private institutes that gave them training for aviation jobs. In the end, the airline reinstated most of its employees because of political pressure from the regional, right-wing party the Maharashtra Navnirman Sena (*MNS*). The Chairman of Jet Airways Naresh Goyal, went on record through the Indian media as saying that he regretted the lay-offs because many of the employees were like his daughters. In summer 2009, there were reports once again about regular jobs cuts in Jet Airways. Kingfisher, India's premier airline started by industrial tycoon Vijaya Mallya, had been under media scrutiny for its increasing debts, growing losses and lay-offs. The merger of two leading private airlines Jet Airways and Kingfisher was expected to lead to further job cuts in the industry.

At the Institute of Airlines, the Director waived aside the question of trouble in the aviation industry. "Everything is under control. Jobs are not a problem at all. Shortage of manpower is the problem. There are lakhs of jobs waiting to be created in the industry." For both young women, the promise embedded in such programs and employment was associated with glamour, with jobs that promised clean, air-conditioned environments and are different from the manual labor done by their fathers and brothers. The confidence that faculty and management at this institute and similar private

training schools represented was seductive for young low-income women like Bano and Farida although they recognized the contradictions. During interviews, Farida talked about two young neighborhood girls who had lost their jobs with an airline company, and had extensive debts from their training programs at a similar institute. Farida emphasized that she was told in the orientation program at the Institute of Airlines that gaining and maintaining jobs depends on individual initiative and skill. The faculty was meant to focus on "soft skills" such as business etiquette, listening politely, communication, negotiation and language skills in addition to computer skills for young women. As new technologies and new forms of labor become increasingly more feminine and gendered, it becomes more important to take into account questions of structure and power that are often ignored in the perception of new technologies as unqualified emancipation for women. Subjects of ICT and development projects are often low-income minority women who are arguably economically and socially vulnerable as recent entrants into "pink-collar" jobs in the service industry.

Among Seelampur ICTD participants, the Delhi Metro Rail System also presents opportunities for work after the basic computer course at the center. The Delhi Metro is a comparatively new system in Delhi that became operational in 2002. The Delhi Metro Rail Corporation (DMRC) is a joint venture company between the central Government of India and the Government of the National Capital Territory of Delhi. It became the first public transportation system in Delhi to introduce automated ticketing services instead of manual ticketing. The ticketing services at metro stations are usually handled by young men and women and these jobs require basic computer knowledge. At an interview at the DMRC, a PR official estimated that the total number of their ticketing employees was around seven hundred fifty and half of these employees were women. In my ethnographic research, I found that the DMRC contracted its ticketing needs to two private-sector companies through an open tender system similar to its other departments. Although the DMRC conducted short training sessions for its employees, the individuals who worked in ticketing were employed by the two private-sector firms that handled recruitment and compensation. The DMRC required ticketing employees to be high-school graduates and paid minimum wages for semi-skilled labor as part of contracts that required employees to work for a minimum of a four-hour shift. Depending on the hours of work, employees earn around Rs. 3000-4000 or approximately \$100 a month. Management staff at the DMRC claimed that they scrutinize the accounts of their contractors to make sure those minimum wage requirements, a retirement fund and employee insurance in case of accidents on the job site are complied with. Senior

management people at the DMRC perceived these jobs as popular and easy semi-skilled jobs that could be done from the comfort of an air-conditioned room in the metro stations.

In Seelampur, Metro station jobs were in fact considered to be different from “semi-skilled” labor. Young women perceived these jobs as comparatively glamorous jobs that are “safe” for women. Rahina, who had just completed high-school, searched for jobs in nearby malls after her computer course at the GRC and finally found a ticketing job at the Delhi Metro. At the interview, she was asked basic questions about simple calculations and typing abilities and then given a brief training session on specific computer programs and customer relations. Rahina worked eight hour shifts every day from 2-10 pm and earned Rs. 3,600 or approximately \$75 a month. She had younger sisters in school and her brother drove a three-wheeler motor vehicle, the auto-rickshaw that is a popular mode of public transport in Delhi. Rahina’s father worked as a daily wage laborer doing carpentry work. She saw her Metro station job as a means to take her family away from the Seelampur slums where they currently lived. She hoped to get a better-paying job through her basic knowledge of computers and work experience with the Delhi Metro.

Rahina’s accounts of her work were often rooted in her gendered experience of dealing with customers at the metro stations. Many men talked to her rudely and had been abusive:

Sometimes men talk to me like I am a male local bus conductor and I feel really insulted. But they teach us to smile politely and humor them so I do that. I learnt at the training program that the customer is always right and without him, we do not have a job. So even if men talk to me rudely and misbehave, I have to smile and handle them well.

Although metro employees have the option of working four-hour shifts, many of them like Rahina worked eight-hour shifts to earn more money:

I work an eight-hour shift. You cannot take a break during this shift to eat, drink tea or sometimes even to go to the bathroom. We have someone who is supposed to replace us after our shift but sometimes that does not happen and we end up working overtime many days without food or bathroom breaks.

The Delhi Metro Rail Corporation has emerged as a powerful employer in the Delhi Region and outsources most of its work in different departments such as hospitality, security, maintenance procedures and some technical

jobs to private-sector companies. Officers at the DMRC asserted that they maintained their rights as principal employers and regularly monitored these companies for appropriate labor practices. However, the nature of contract work translates into an unorganized labor force, which is likely to have short-term contracts, less benefits, unstable working conditions and employment. Young women often form a part of such an unorganized labor force and dictums of “customer politeness” can place them in vulnerable positions. Learning computers and getting service sector jobs are seen as the means to a better life among ICTD project participants but the effects on their lives are felt in complex and contested ways that disrupt linear narratives of technology, development and emancipation for women.

Conclusions

This article critically explores women and work following the participation of low-income, minority Muslim women in a globally acclaimed ICT and Development initiative located in one of Delhi’s largest resettlement colonies--Seelampur. As new technologies and new forms of global labor increasingly become more feminine and gendered, these shifts are experienced in contesting ways in everyday lives of urban marginalized women and also impact myriad relations of power within their communities. One of the principal aims of the ICTD project in Seelampur has been to enable young women to find work as part of the formal and organized modern workforce. Although project producers and participants are empathetic in their beliefs that learning computers will help Seelampur women to get such jobs, there is often a vast divide between the promise associated with new technologies and on the ground realities. The everyday lives of Seelampur women who do find work after their involvement in the ICTD project are fraught with contesting global and local forces.

Teaching computers at home is considered to be an attractive and safe option for many women but such work is often diluted as “women’s work” within the community and absorbed into other forms of informal labor within the house and for manufacturing industries in Seelampur. Service and ticketing jobs in the Delhi Metro System and the airlines industry involve a wide range of institutional actors and global economic forces. There are contesting narratives of employment, training and well-being among these different actors that must be understood in the broader context of the international and gendered division of labor. While pink-collar jobs in the service sector help young women in Seelampur to earn an income and are often perceived as glamorous work, this work has conflicting consequences at their workplace and in their daily lives. In studying the local case of Seelampur, this article aims to go beyond

questions of “digital divide” and access to technology and provide a grounded ethnographic picture of the complex arena of new technologies and development practices for women that constantly interface with the politics of gender and labor practices.

FOOTNOTES

[i] Grades 9-12 in India can be broadly called high school. In Delhi, completing grade 10 would mean that individuals would still need to pass two more grades before being eligible for college. In some other states, passing grade 10 qualifies an individual for ‘junior college.’”

[ii] The 1984 anti-Sikh mob riots in Delhi were brief but led to the death of thousands of deaths of followers of the religion Sikhism, following the assassination of India’s Prime Minister Indira Gandhi by her two Sikh bodyguards. Areas on the other side of the river Yamuna, that include Seelampur that has diversity in pockets, were worst impacted by these mob riots. The demolition of the historical mosque in the city of Ayodhya by Hindu fundamentalists in 1992 has been the site of one of the worst communal conflicts and violence in India’s recent history. Seelampur, which is largely an area inhabited by Muslim communities, was a prime site in Delhi for the outbreak of several violent incidents and deaths in Hindu-Muslim communal conflicts following this incident.

[iii] The Indian National Emergency lasted from June 1975- March 1977 and was formally declared by President Fakhruddin Ali Ahmed upon pressure by Prime Minister Indira Gandhi under the Indian Constitution. This is a highly controversial time in India’s history that led to violation of several civil liberties, torture by the state and police and destruction of minority slum areas and low-income housing colonies. There were several forced sterilization and vasectomy procedures done on low-income, minority men during this period ostensibly to control population, a campaign that was spearheaded by Indira’s son Sanjay Gandhi. During this controversial period, Muslim communities were relocated to Seelampur

after state destruction of their homes in the old city of Delhi and often promised small plots of land in exchange for being sterilized.

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