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Women and Globalization: Challenges and Opportunities Facing Construction Workers in Contemporary India

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Women and globalisation: challenges and opportunities facing construction workers in contemporary India

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This article identifies the opportunities and constraints faced by female construction workers in urban India, citing empirical research conducted in the city of Ahmedabad. The Self-Employed Women's Association (SEWA) conducted three surveys in 1998, 2003, and 2007 to learn more about the needs and priorities of construction workers in the context of economic globalisation. While enthusiastically endorsing the role that training and certification can play in providing skilled women with opportunities for quality employment, the author emphasises the need for wider policy intervention at the state and national levels to ensure that such programmes have replicable, sustainable, and gender-equitable results.

Les femmes et la mondialisation: défis et occasions pour les ouvrières du secteur de la construction dans l'Inde contemporaine

Cet article met en évidence les occasions et les contraintes auxquelles sont confrontées les ouvrières du secteur de la construction en milieu urbain en Inde à travers des recherches empiriques menées dans la ville d'A Ahmedabad. La Self-Employed Women's Association (SEWA) a mené trois enquêtes en 1998, 2003 et 2007 afin de comprendre les besoins et les priorités des ouvrières du secteur de la construction dans le contexte de la mondialisation économique. Bien qu'elle adhère avec enthousiasme au rôle que la formation et la certification peuvent jouer au moment de fournir aux femmes qualifiées des possibilités d'emplois de qualité, l'auteur met l'accent sur la nécessité d'une intervention plus large aux niveaux de l'État et national pour veiller à ce que les programmes de ce type aient des résultats reproductibles, durables et équitables sur le plan du genre.

Mulheres e globalização: desafios e oportunidades que trabalhadoras da construção enfrentam na Índia contemporânea

Este artigo identifica as oportunidades e restrições enfrentadas pelas trabalhadoras da construção na zona urbana da Índia através de uma pesquisa empírica conduzida na cidade de Ahmedabad. A Associação de Mulheres Trabalhadoras Autônomas (Self-Employed Women's Association – SEWA) conduziu três pesquisas em 1998, 2003 e 2007 para compreender as necessidades e prioridades das trabalhadoras da construção no contexto da globalização econômica. Embora aprovando entusiasticamente o papel que o treinamento e a certificação podem desempenhar na oferta de oportunidades às mulheres qualificadas para emprego de qualidade, a autora enfatiza a necessidade de uma intervenção de política mais ampla em

nível estatal e nacional para garantir que tais programas tenham resultados que possam ser reproduzidos, que sejam sustentáveis e equitativos em termos de gênero.

Las mujeres y la globalización: desafíos y oportunidades que enfrentan las trabajadoras de la construcción en la India de hoy

Este ensayo identifica las oportunidades y retos que enfrentan las trabajadoras de la construcción en las ciudades de la India basándose en investigaciones realizadas en la ciudad de Ahmedabad. La Asociación de Mujeres Autoempleadas (SEWA por sus siglas en inglés) realizó tres encuestas en 1998, 2003 y 2007 con el objeto de conocer las necesidades y prioridades de las mujeres de la construcción en el marco de la globalización económica. La autora destaca la gran importancia que pueden tener la formación y la certificación para que las mujeres capacitadas tengan acceso a un empleo digno. A su vez insiste en la necesidad de implementar políticas adicionales a nivel estatal y nacional para asegurar que estos programas sean replicables, sustentables y equitativos en relación al género.

KEY WORDS: Gender and diversity; Globalisation; Labour and livelihoods; South Asia

Introduction

The construction industry is one of India's fastest-growing sectors, with an annual growth rate of 10 per cent (Construction Industry Development Council 2003). It is the second-largest generator of employment after agriculture, absorbing an estimated 30 million Indians, of whom 51 per cent are women. The construction sector contributes to about five per cent of India's Gross Domestic Product (GDP) and about eight per cent of its capital formation. However, unlike other industries where they are increasingly employed in semi-skilled and skilled occupations, women are engaged almost exclusively as casual manual labourers in the Indian construction industry. They are mostly head-load workers, who carry bricks, cement, sand, and water from one place to another. Alternatively, they clean, dig, mix mortar, or break stones. Groups of women carrying loads of bricks weighing up to 35–40 kg on their heads are a common sight on construction sites in India. Very rarely do these women have the opportunity to acquire skills in more lucrative – but largely male-dominated – trades such as carpentry, masonry, plumbing, and electrical work.

India is certainly not the only country to discourage women from participating in skilled occupations in the construction sector. The experiences of women working in the industry differ widely from one nation to another, but there are common themes underlying their diverse situations. The construction labour market is segmented along gender lines in both developed and developing countries, with women concentrated in low-paid jobs, or working without remuneration, while men undertake the better-paid skilled work. There are barriers to women's entry into the skilled construction trades almost everywhere in the world (see, for example, Little 2005; Price 2000, 2006).

This article identifies opportunities and constraints faced by female construction workers in India, citing research conducted in Ahmedabad in collaboration with the Self-Employed Women's Association (SEWA) – a trade union founded in 1972 in the western state of Gujarat to organise women in the informal economy for better working conditions and social-security provisions. In order to understand the priorities and needs of women engaged in construction work, SEWA carried out two surveys of 250 individuals – 125 male and 125 female construction workers in each survey – in Ahmedabad in 1998 and 2003. Another

survey of 193 female construction workers was carried out in 2007 to assess the impacts of the training programmes that had been conducted by the SEWA Mahila Housing Trust (MHT) since 2003. This article analyses key findings from the three surveys and discusses broader policy implications that emerge from SEWA's experiences of training women in construction work.

Women in the Indian construction industry

Women's exclusion from – or marginalisation within – skilled construction trades is a fairly global phenomenon. It has been researched, documented, and analysed in many different countries but presents special challenges for women in countries that are experiencing rapid integration into the global economy. The liberalisation of the Indian economy in the early 1990s, and the associated global tendering requirements of the World Trade Organization (WTO), has enabled transnational companies to compete in the Indian construction industry for large public-sector infrastructure developments as well as private-sector industrial projects. Many multinational and transnational construction companies are now involved in large projects, building roads, bridges, and metro rail systems as well as pharmaceutical plants, factories, and refineries (Chen 2006). Equipped as they are with the latest technology, machinery, and construction methods, the entry of these companies is beginning to have far-reaching implications for the domestic construction industry, as well as for manual labour. Depending on the type of activity, economic liberalisation and mechanisation are estimated to have reduced the overall deployment of manual labour anywhere from one-fifteenth to one-fiftieth of earlier numbers (Jhabvala and Kanbur 2002). The mechanisation of the Indian construction industry is expected to lead to a reduction in employment of 1.5 million – mostly unskilled – workers every year (*ibid.*).

While the demand for unskilled labour is dwindling, that for skilled construction workers is growing dramatically. This is especially true in urban India, with its significantly higher demand for specifically skilled labour over unskilled or even generally educated labour. This phenomenon has been well documented in the Indian context (see, for example, Breman 2004). In such an environment, unskilled manual workers in general, and women in particular, will increasingly be eliminated from construction sites.

Research location and context

With a population of over 5 million in 2006, Ahmedabad is the largest city in the state of Gujarat and the seventh largest metropolis in India. Historically, the city's economy was almost solely based on the cotton textile industry. At its peak in the late 1950s and early 1960s, the textile industry employed 125,000–135,000 workers, and the Textile Labour Association (TLA), a trade union of textile workers, had more than 100,000 members. By the mid-1990s there were only 30,000–35,000 workers left in the industry, of whom only 25,000–28,000 belonged to the TLA (Varshney 2002). Cheaper synthetic textiles appeared in the market after import restrictions were abolished following India's economic liberalisation in 1991. The inability to compete with automated mills whose products were inundating the market in the 1980s and 1990s also contributed significantly to the collapse of the local textile industry. The impacts of mill closures on the local economy were disastrous. Very few retrenched workers received compensation, and most entered the already bloated informal economy. The available data indicate that incomes from the informal economy are too low to keep households out of poverty, since such work takes place with virtually no capital assets and very low levels of technology (Kundu and Mahadevia 2002). Furthermore, due to the frequently seasonal nature

of work in the informal economy and the limited and irregular hours or days of operation, a large majority of workers are very vulnerable to market fluctuations. The informal economy is now considerably larger than the formal economy since the collapse of the cotton industry. The membership of SEWA, for example, has grown dramatically over the period. By 1995, it had 55,000 members in Ahmedabad alone (SEWA 1995). It is currently the city's largest union, far exceeding the numbers affiliated to the TLA in the 1990s.

SEWA's accomplishments in organising construction workers

Large numbers of workers displaced from the textile mills in Ahmedabad entered the construction sector as unskilled and semi-skilled labourers, many of whom initially moved to the cloth-dyeing and printing factories on the outskirts of the city. SEWA had begun organising women in these factories in the late 1980s. However, many of these establishments also succumbed to growing mechanisation in the 1990s, and although many men continued to be employed in them, most women lost their jobs and large numbers sought work in the construction industry.

SEWA's membership comprises three broad categories of worker: small vendors, traders, and other micro-entrepreneurs; self-employed or contracted home-based workers such as tailors, embroiderers, and toy makers; and manual labourers (including construction workers) and other informal service providers such as waste collectors and rag pickers. In 2000, manual labourers and informal service providers constituted the largest segment – 83,844 or 57 per cent – of SEWA's Gujarat membership (SEWA Academy 2000).

Construction workers are the largest group of manual labourers in Ahmedabad. In 2000, there were an estimated 500,000 women engaged in the construction industry in the state of Gujarat, of whom approximately 50,000 were based in the city. SEWA started organising these workers into a union of their own in 1996. By 2006, 11,230 construction workers in Ahmedabad were SEWA members. This represents two per cent of SEWA's total membership in Gujarat and about eight per cent of its urban membership (MHT 2006). SEWA's organising, mobilising, and advocacy efforts have led to a few noteworthy policy changes at the state level recently, including the issuing of identity cards that entitle construction workers to a small maternity benefit, as well as legislation to support them. In Gujarat, organised construction workers – including SEWA members – have recently put pressure on the government of Gujarat to adopt and implement a decade-old piece of national legislation, the Construction Workers Protection and Welfare Act of 1996. There is a provision under this Act for a tax on the construction industry, aimed at creating a welfare fund for construction workers. In 2002, the SEWA Insurance Co-operative started a special Accident Insurance Scheme for construction workers. SEWA has also made an effort to improve the lives of construction workers by opening 25 day-care centres at construction sites or near the homes of workers. To ensure sustainability, this service requires substantial financial input from the builders, as well as from the government.

Although SEWA's efforts to organise construction workers in the late 1990s gave the latter some visibility and a voice, their working conditions continued to deteriorate in the new millennium for a variety of reasons. An earthquake measuring 6.9 on the Richter scale hit Gujarat in January 2001. Before this, the construction industry in Ahmedabad was doing well. There was enough work for local residents, and many poor rural migrants flocked to the city to work in this relatively well-paid sector. However, following the earthquake the government imposed stricter laws and zoning regulations on the industry, because the collapse of many new buildings, which had resulted in hundreds of deaths, was attributed to poor construction quality. In addition to national and global economic changes, the more local economic recession following the earthquake rendered construction workers more vulnerable to poor working conditions and under-employment.

Despite such setbacks, SEWA has made remarkable strides in the overall empowerment of women in the construction sector. The biggest accomplishments in training and certifying women in cutting-edge construction skills and connecting them with sustainable employment opportunities rest with the SEWA Mahila Housing Trust (MHT), which was established as a sister organisation in 1994 to meet the housing and infrastructure-related needs of poor women in the informal economy.

The Karmika School for Construction Workers

One of the strongest recommendations that emerged from both the 1998 and 2003 surveys, which will be discussed below, was the need to upgrade, diversify, and certify the skills of women in new technologies and emerging standards in the construction industry. Closely related were recommendations to provide women with on-the-job training at construction sites; the need to link women to large-scale employment opportunities in the public and private sectors; and the need for state- and national-level policies enabling women to translate their training and skills into sustainable employment opportunities. In an effort to respond appropriately to such findings and to build upon its considerable experience in the construction sector, in 2003 MHT established the Karmika School for Construction Workers in Ahmedabad.

By 2007, Karmika was equipped to provide a specialised comprehensive three-month training module in the following trades: masonry; painting; plastering; tiling; plumbing; electrical wiring; carpentry; welding; roller operation; excavation; rubble masonry; bar bending; and training for lab technicians. MHT also trains workers in short-term specialised skills such as the construction of toilets, disaster-resistant houses, and other local housing infrastructure like drains, sewers, and landscaping. In addition to technical skills, MHT's training modules include functional literacy and life skills such as conflict resolution, and bargaining and negotiation with contractors and other employers. A baseline survey administered to trainees revealed that 50 per cent were non-literate, and 35 per cent had between two and eight years of schooling. Only 13 per cent had more than eight years' formal education. Most trainees possess minimum literacy skills, either because they never attended school or because the few skills they did possess regressed due to lack of use. The incorporation of functional literacy and life skills into the technical training module, over and above the practical training and certification, equips women with an additional level of confidence and competence.

In order to ensure that workers also receive certification in their chosen trade, MHT worked in partnership with the Construction Industry Development Council (CIDC). This is a highly strategic partnership, since the CIDC is an apex organisation set up by the federal Planning Commission of India for the development of the construction sector. MHT also partnered the Indira Gandhi National Open University (IGNOU) to facilitate distance-learning programmes using Web-based technology as well as television and radio programmes, in addition to training and certification. MHT has also forged links with private-sector building firms. Given the highly competitive nature of the construction industry, these firms have struggled to find and retain highly skilled labour. When they first heard about the Karmika School, they approached MHT to request a steady stream of trained and trainable construction workers. Barring differences in philosophy and working styles, which will be discussed below, these collaborations have been mutually beneficial. Recruiting groups of Karmika graduates for on-the-job training and employment on construction sites served the dual purpose of fulfilling the builders' needs for a sustainable supply of skilled labour and MHT's commitment to link skilled women to employment opportunities.

Recruitment into Karmika training programmes takes place in two ways. MHT's spearhead teams visit *kadiyanakas* (sites where workers assemble in the morning in order to be recruited

by contractors) to tell women about the training programmes. Former and current trainees inform other women on construction sites about the benefits of the training. MHT also organises exposure visits for women who show some interest, providing an opportunity to visit the Karmika School and to try their hand for a day at various trades.

MHT provides trainees with a daily stipend and transport costs. Workers in the informal economy are already actively engaged in economic activities, however small-scale and marginal, and their households rely on their daily earnings. Few women can afford to take the time out from their existing income-generating activities to learn new skills – however lucrative they may be in the long run – if they are not compensated financially during the training. A number of feminist economists have criticised efficiency-driven approaches to development for implicitly assuming that women's time and energy are limitless (Beneria 2003; Moser 1993). The payment of a stipend ensures that women's eagerness to learn new skills does not translate into domestic financial crises due to loss of income.

Findings of surveys in 1998, 2003, and 2007

The ability to use empirical research findings to advocate gender-equitable social and economic policy at the state and national levels is one of the defining features of SEWA and its sister organisations' work in India. In order to successfully organise and train women in the construction industry, SEWA has conducted three surveys to understand their needs and priorities.

1998 Survey of Construction Workers

SEWA Academy (the Research and Documentation Unit of SEWA) conducted a survey in 1998 to learn more about the opportunities and constraints faced by women in the construction industry. A total of 250 questionnaires were administered randomly to 125 men and 125 women at 50 *kadiyanakas* in different areas in Ahmedabad. *Kadiyanakas* are recruitment sites for the vast majority of male and female casual construction labour in the state of Gujarat. A few public and private building companies in Ahmedabad hire and house male labourers on a longer-term basis on their sites, but there are no unionised hiring halls, for example, through which male or female construction workers may seek work. Surveys took approximately 30 minutes to complete and were administered in an alternating manner to men and women at each *kadiyanaka*. Although no financial or other incentives were offered, non-response rates were extremely low.

The major constraints facing unskilled and semi-skilled construction labourers revealed by the 1998 survey were as follows.

Lack of specialised skills and/or opportunities to perform skilled work: Ninety-two per cent of the female respondents identified themselves as 'unskilled', although a small number were engaged in semi-skilled tasks. While 68 per cent of women served as manual head loaders on construction sites, only 37 per cent of men were engaged in load carrying. The majority of men were involved in semi-skilled or skilled work such as masonry and tiling. Ten per cent of women were employed as semi-skilled labourers – usually assisting male masons in tasks such as plastering or concrete mixing. Despite performing semi-skilled tasks, such women were more often than not paid the same wages as unskilled female workers.

The women performed nine main types of work on the construction sites, while their male counterparts performed 21 different activities. Ninety-three per cent of the women had never had any kind of training in construction work, but had learned on the job. However, 64 per cent of women and 60 per cent of men mentioned that they were from families traditionally

employed in construction. Some had become construction workers after migrating from rural areas, while the rest took it up after losing other employment opportunities.

Lower wages and lack of employment security: At Rs 128 (US\$ 3.20) per day, the average male wage for manual labour was more than twice that of the average female wage of Rs 60 (US\$ 1.50). The average monthly and annual incomes of men were similarly at least more than twice those of women. Ninety-eight per cent of men surveyed and 90 per cent of women said they were casual labourers, hired by contractors on a daily basis from the *kadiyanakas*. The remaining two per cent of men and 10 per cent of women indicated that, while they were working as casual labourers at the time of the survey, they had occasionally secured longer-term contracts. These findings do not tell us why more women in the sample had, at least in the past, been able to secure longer-term contracts than men. However, given the significant difference in wages between men and women, it may be inferred that contractors are more inclined to hire women on longer-term contracts simply because they are more likely to accept lower wages. While none of the surveys asked them directly, informal conversations with female construction workers suggest that women are much more likely than men to accept poorly paid work if it offers more security.

Both men and women stressed the lack of job security. Only 12 per cent of the women had heard of unions, and 95 per cent expressed their willingness to join SEWA once they were told about the organisation. Eighty-five per cent of women surveyed wanted more regular work and other improvements in their working conditions. The same number expressed enthusiasm to upgrade and diversify their construction-related skills.

Injuries and lack of basic amenities: Of the men surveyed, 13 per cent had sustained physical injuries, compared with 51 per cent of women. Also, a higher percentage of women (89 per cent) than men (74 per cent) said that they had physical problems associated with their work. For example, 70 per cent of women reported chronic backache.

While 48 per cent of male workers also complained about the lack of basic amenities other than drinking water on the construction site, 55 per cent of surveyed women specifically mentioned being inconvenienced by the absence of child-care provisions and toilet facilities. The duty to provide accident insurance, basic sanitation, and first-aid facilities was also completely ignored on many construction sites. There were no toilet facilities on 64 per cent of the sites, and 45 per cent did not even provide drinking water for workers.

2003 Survey of Construction Workers

In 2003, SEWA Academy carried out a repeat survey to assess the changes in the sector more comprehensively. In order to ensure continuity and comparability, the 2003 survey was also based on a random sample of 125 male and 125 female workers at 50 *kadiyanakas* in Ahmedabad. One key finding was that the number of workers gathering each day at the *kadiyanakas* had increased dramatically in the intervening five years. Whereas around 200 workers used to assemble at the two largest *kadiyanakas* in 1998, 500 to 1000 workers assembled every day in 2003. The other major findings of this survey are detailed below.

Shift in caste composition: In the 1998 survey, all of the construction workers were from the Scheduled Castes (SC) and Scheduled Tribes (ST) – Indian communities that are explicitly recognised by the Constitution of India as requiring special support to overcome poverty resulting from centuries of discrimination by mainstream Hindu society. In the 2003 survey, 85 per cent were from SC/ST communities, and 15 per cent were from what are officially

called Upper or Forward Castes. By themselves, these figures tell us little about the reasons why people are entering the construction sector, but it would not be far-fetched to infer that loss of employment in other sectors is forcing people who would not typically seek employment in it into construction work. Although the survey did not specifically ask female respondents for their reasons for entering the construction sector, it is reasonable to infer that some Upper Caste women may also have been forced to enter the paid labour force for the first time because of the decline or loss of male breadwinner wages.

Increased preference for skilled workers: The proportion of skilled workers on the construction site increased from 24 per cent to 39 per cent between 1998 and 2003. Workers with multiple skills were in very high demand at the time of the 2003 survey.

Changes in earnings: Depending on the type of work, the wages for skilled labour – masonry, carpentry, plastering, cementing, tiling, electrical wiring, plumbing, and painting – had increased in real terms anywhere from 30 to 50 per cent between 1998 and 2003. However, the earnings of unskilled workers – those who prepare and carry bricks, cement, sand, and other building materials – remained the same or decreased slightly. In 2003, skilled construction workers earned between Rs 100 (US\$ 2.50) and Rs 150 (US\$ 3.75) per day, while unskilled workers earned an average of Rs 50 (US\$ 1.25) per day.

Increased seasonal irregularity of work: Construction work is most active during the winter months, slowing down during the summer because of higher temperatures and lower water availability; it stops almost completely during the monsoons. In the 2003 survey, about 46 per cent of the respondents reported getting work only in the winter, another 43 per cent reported getting work in both winter and summer, and only 11 per cent reported getting work throughout the year.

Decline in employment opportunities overall: Female workers got an average of 16 days of work per month in 1998, versus 11 days in 2003. Overall in the 2003 survey workers complained that they were getting fewer days of work. Nearly two-thirds of the respondents (61 per cent) blamed the decline in employment opportunities on the contractors' preference for migrant workers from poorer states such as Bihar and Orissa, who worked for lower wages and often lived on the construction site. Another 34 per cent blamed the decline on increased mechanisation: digging and lifting machines have replaced manual labour, while other equipment has displaced skilled workers who used to do plastering and related tasks. A significantly smaller six per cent of workers blamed the decline in employment opportunities on a general decline in the construction industry due to price hikes, water shortages, lack of funds, and the general post-earthquake economic slump.

2007 Survey of Karmika Graduates

By 2007, MHT had trained a total of more than 5000 people in the state of Gujarat. In order to assess the impacts of its training activities, a survey was conducted in 2007 of 193 women in Ahmedabad who had completed the Karmika training programme. The surveys were carried out over a two-month period between June and August 2007. Approximately 100 surveys were administered at the construction sites on which trained women had found employment, while others were carried out when former trainees visited the School. The survey was also administered to the five trained women who were employed by MHT as trainers. The findings of the survey are summarised as follows.

More working days: Following completion of training, 40 per cent of women reported receiving 21–30 days of work per month, while only 26 per cent indicated receiving the same amount of work before training.

Higher incomes: Eighty per cent of trained women reported higher incomes after training. While only 20 per cent of the women had received between Rs 70 (US\$ 1.75) and Rs 100 (US\$ 2.50) before training, 70 per cent of the women surveyed did so after training. The incomes of trained women rose by between Rs 10 (US\$ 0.25) and Rs 50 (US\$ 1.25) per day. Nearly 55 per cent reported that their daily wages grew by between Rs 21 (US\$ 0.50) to 50 (US\$ 1.25), while 13 per cent reported wage gains of more than Rs 50 (US\$ 1.25) per day.

More women employed as masons: All the women surveyed had previously worked as unskilled labourers. After training, 30 per cent worked as helpers to masons, while another 20 per cent worked as masons. Four of the women surveyed had become independent contractors. The Karmika School currently employs five trained women as trainers in masonry, tiling, carpentry, and electrical wiring.

Ability to do skilled work: After training, 45 per cent reported being able to do any type of work. Eighteen per cent were able to produce better finishing effects, and 25 per cent could do plastering and masonry.

Contractor behaviour: During the training at Karmika many women spoke of sexual harassment and rude behaviour by contractors. Women usually go in groups to look for work, to avoid being sexually harassed. Most women mentioned staying at home or looking for other work if no one could accompany them to the *kadiyanaka*. After training, four per cent of the women were sufficiently confident to go to work alone. Eighty-five per cent of the women reported that contractors were quite respectful towards them, with only seven per cent reporting sexual and verbal abuse, as compared with 24 per cent before training. It may be simplistic to suggest that contractors are less likely to harass trained and certified women, but it is reasonable to suggest that a combination of skills training and certification, as well as training in conflict resolution, negotiation, and assertiveness, renders women less vulnerable to sexual harassment on construction sites.

Higher confidence levels: Sixty-eight per cent reported feeling more confident in doing skilled construction work. Many reported higher status within the family and better bargaining skills.

Results and policy implications

Through its continued efforts to train construction workers since 1999, and especially with the establishment of the Karmika School for Construction Workers in 2003, MHT has succeeded in planning, developing, and implementing an explicitly pro-women training programme that few other NGOs could claim to provide. Although MHT has enjoyed considerable successes in its attempts to provide training and certification to construction workers, it has also faced – and continues to face – significant constraints at the local, state, and national levels. These are worth documenting and analysing, because they may challenge the sustainability of its programmes. They are also highly instructive for broader policy purposes.

Payment of stipends

A survey of Karmika trainees revealed that 85 per cent were married with children, and 13 per cent were widowed or divorced with children. Thirty-two per cent were below the age of 30, another 47 per cent were between the ages of 31 and 40, and only 20 per cent were over the age of 40 years. Construction work carries a very low social status in India, and the vast majority of women entering the sector do so out of economic necessity. Most women who come for training are very open about this. They are also determined to do anything to prevent their daughters from having to pursue the same line of work. In the interest of earning a stipend, however, many women will bring their daughters along for training, even if they have no intention of allowing them to pursue construction work later. The payment of stipends during the training is a double-edged sword: it allows women to sustain themselves and their families during the training, but it also attracts women who are not really interested in pursuing construction work. MHT has not found a suitable solution to this problem, but it is important to strike a balance between being sensitive to women's economic situations and not wasting precious programme resources.

Lack of sustained funding

Despite its proven competence in training women, and the success that trained women have enjoyed in finding quality employment opportunities, MHT has struggled to find sustained funding for the Karmika School. This is ironic and counterintuitive, given the current high demand for skilled construction labour in India. Entrenched prejudices against women in non-traditional occupations are probably at least partly to blame. MHT Co-ordinator, Bijal Bhatt, stresses that if MHT were to run a construction school for men, Karmika would surely be inundated with funding from multiple sources!

Stable and consistent sources of funding would enable MHT not only to develop more advanced training modules, refresher courses, and distance-learning courses but also to build the institutional capacity to replicate them in other parts of India. Scaling up the programme within and beyond Gujarat, perhaps in collaboration with other stakeholders, would give women in skilled construction work, and the issues that confront them, tremendous visibility. It would enable MHT to assume a leadership position in advocating appropriate pro-women policies and interventions on the part of state and national governments.

Infrastructural and technical assistance

MHT also needs more technical and financial support to purchase new and advanced machinery for a range of construction tasks. In addition to giving women the opportunity to train and practise on such machines, it would enable MHT to create sources of income by renting these out to different construction sites. For example, MHT would like to acquire vans equipped with laboratories for testing the purity and grade of building materials. Trained lab technicians could travel to different sites and charge a fee for their services. Maintaining services like mobile laboratories, cranes, road rollers, bulldozers, and other heavy equipment would be expensive and require, at least initially, strong financial backing. Other challenges, such as teaching women to drive heavy vehicles (with all their associated socio-cultural impediments), would also have to be addressed.

Finding placements on large-scale infrastructure projects

Despite a promising start with private builders, MHT's success in putting skilled women to work on large infrastructure projects is very limited. Many MHT trainees were employed to

work on rural housing projects as well as on slum up-grading projects, but while women have gained income and considerable experience by working on such local projects, the larger and more lucrative infrastructure projects such as highways, freeways, and metro systems remain virtually untouched. Scaling up the training programmes, providing women with advanced skills, and overcoming social and cultural barriers to facilitate their entry to sustained employment on such projects present considerable challenges for MHT.

Scaling up access to training and certification

While MHT's effort to train women in different trades in construction work is commendable, there are significant opportunities to scale up such programmes within and beyond Gujarat. MHT has already embarked upon similar training activities in smaller cities in Gujarat such as Surat and Baroda. There is also the potential to expand to different cities in the state of Rajasthan, where MHT is already engaged in urban infrastructure projects. Beyond its ability to replicate similar training programmes in other parts of India, there is a tremendous role that MHT – with all its collective in-house experience – can play in building the capacity of other NGOs interested in embarking upon similar activities. Because significant human and financial resources are required to develop training programmes for construction workers, they have become the domain of larger better-funded NGOs. On the other hand, because they frequently know their constituencies intimately and can afford to be more flexible and creative in their services and operations, smaller NGOs have certain advantages over their larger counterparts. Smaller and mid-sized NGOs could therefore draw upon the experiences and expertise of larger NGOs like MHT to develop similar programmes. Funding organisations and larger better-established NGOs such as MHT can also support the efforts of smaller NGOs by building their capacities to develop training and certification programmes in construction trades.

Persistent prejudice against women

The provision of skills training and certification for women in the construction sector is a significant step forward. There is certainly reason for guarded optimism that women will be able to translate their training into sustainable employment opportunities. However, there is a need to exercise caution. There have been many attempts in the past, in both developed and developing countries, to create opportunities for women to acquire construction skills. While there is no doubt that this can be done, much evidence suggests that it is easier for women to acquire the skills than to find subsequent employment as skilled workers. In country after country, experiences are similar – women face immense social and cultural barriers to entering the traditionally 'macho' construction industry (see, for example, Adubra 2005; Watts 2007). Despite MHT's efforts in training and advocacy, women construction workers face challenges on many fronts – ridicule from family and friends, pervasive discriminatory practices within the construction industry, and their own diffidence and lack of confidence.

The private-sector builders that sought to collaborate with MHT repeatedly demanded male workers, because they were convinced that women could not build as efficiently as men. Most agreed to accept women into the on-the-job training programmes only because of the current shortages in skilled labour in the construction sector. MHT had to convince the builders to accept a 30 to 70 per cent female–male ratio of trained workers for their construction sites. The MHT Co-ordinator stresses that if a different organisation could provide a similar number of skilled men to the builders, their entrenched prejudices would no doubt lead them to select skilled male workers over female Karmika graduates. There has been dramatic economic growth in India in the past decade. Because of the current construction boom in

urban India, skilled women workers are increasingly finding work at comparable wages with men. However, deep-seated prejudices leave women extremely vulnerable in the future to market forces, competition, and fluctuations in the global and local economy.

Given such barriers, there is a significant role that NGOs like MHT can play in sensitising private and public agencies about the contributions that skilled women make to the construction industry. Workshops and seminars aimed at such consciousness-raising may help to bust some of the myths about women's inability to perform comparably with men in the construction sector. In the Indian context, NGOs such as the Working Women's Forum in Chennai and Nidan in Bihar have made concerted efforts to increase public awareness about the challenges faced by women in the construction sector. MHT has organised conferences and seminars that highlight the contributions that women make to the industry. In 2003, for example, MHT organised the first international seminar in India on up-grading the skills of women workers in a globalising construction industry. Sensitisation and public-awareness work done by NGOs will be most successful if combined with policy interventions aimed at ensuring that women are in fact able to translate their training into sustainable employment opportunities.

Policy support at state and national levels

As part of this research, a series of personal interviews was conducted with women who had succeeded over the years in establishing themselves as masons. These women identified many of the same constraints faced by women in non-traditional occupations in other countries around the world. One woman's description of her experience as a mason was especially poignant. While her story may be inspiring to other women who want to acquire skills in traditionally male-dominated occupations, it also illustrates some of the hurdles that women have to overcome:

I used to be the first mason to show up on the construction site. In the beginning, the contractors simply refused to hire women. My husband and sons were not very supportive when I was doing the training so in addition to not being able to bring home any money, I had to put up with their taunts. I went from construction site to construction site looking for work. Finally, I offered to work for free for one contractor. I told him that he didn't have to pay me if he didn't like my work. He made me work for three weeks before offering to pay me half of what he paid the men, even though my work was cleaner and more efficient from the beginning. Also, I didn't take frequent chai, [tea] bidi [hand-rolled Indian cigarette], and gup-shup [gossip or banter] breaks like the men. I worked for that contractor for almost a year at half of what he paid the men. It took many years of perseverance before I could get a higher wage. I still don't earn as much as male masons, but it is more than I earned from vending vegetables. My husband and sons have more respect for me. I like to joke to my friends that these days I am a mistry [mason] and my husband does the istry [ironing clothes].

Within the construction industry, gender-based employment discrimination is pervasive but complex. Experiences narrated by women attempting to enter previously male-dominated occupations across the world strongly suggest that gendered discrimination practices and gender-based wage differentials cannot be overcome by simply improving education and training for women. This is especially true since women frequently need to 'prove' themselves to be as capable as men and are easily prevented from entering certain types of employment, usually on the grounds of physical weakness, inability to produce at the same rate as men, moral danger, or lack of facilities for women workers.

To ensure that women are able to translate their training into equality of employment opportunities with men, it is imperative that organisations like SEWA demand affirmative-action

policy responses from central and state governments which make it mandatory for public- and private-sector builders to give preference to trained women if they are available. Writing about a community development project sponsored by Save the Children (SAVE) in Colombo, Sri Lanka, Fernando (1987) similarly notes that in training women in construction skills, which are traditionally regarded as 'men's work', wider intervention at the national policy-making level is required to ensure that such efforts have replicable results.

There are examples of such policies working quite well within India. The left-leaning state government in Kerala, for example, has an explicit commitment to gender equality. Public housing and infrastructure projects in Kerala are preferentially awarded to women's organisations, provided that they have the technical competence and administrative ability to implement them. Such policies can be tremendously empowering for women's organisations seeking to enter non-traditional areas; but they are the exception rather than the norm in India.

Even policies that are not explicitly pro-women can be beneficial to skilled women if they enable trained workers to enter and be retained by the construction sector. The state government of Madhya Pradesh, for example, gives private builders a five per cent tax exemption for employing certified workers on its construction sites. This policy has no gendered component and is motivated solely by a desire to raise the quality of construction to adhere to WTO-enforced global standards. However, if more states were to implement such policies, they would enable organisations like MHT to make the case for introducing more trained women workers into construction sites.

Conclusion

Writing about the United Kingdom, Greed (2000) notes that the construction industry seemed to be so self-contained and separate from wider social changes that it was helpful to visualise it as 'Planet Construction', upon which live a series of male-dominated professional tribes, each with its own culture and world view. Greed goes on to say that there is a long way to go before major changes are likely to occur in the employment status, pay, and conditions, as women in the British construction sector have hardly reached 'first base' in terms of being accepted within the industry.

A cursory examination of the status of female construction workers in India may lead us to conclude that the Indian construction industry lends itself quite effortlessly to similar analogies. However, a more engaged assessment reveals that a small number of women in the construction industry are breaking down some entrenched social and cultural barriers, albeit largely due to serendipitous and unpredictable changes in the national and global economies. Whether Indian women will be able to build incrementally upon the gains they have made will probably depend on a number of factors. These include continued support from NGOs and other CSOs, scaling up access to training and certification to reach larger numbers of women across the country, and wider policy intervention at the state and national levels to ensure that women are not easily rendered jobless by changes in the national economic climate. It is also important to bear in mind that legal interventions and policy reforms do little or nothing to challenge the underlying social norms and customs that inhibit women's participation in the construction industry. Education and consciousness-raising initiatives that raise awareness among women as well as men about women's equal entitlements to quality employment are just as crucial as policy reforms and state actions that protect women's interests and facilitate their agency.

The findings of the research summarised in this article illustrate that the opportunities and constraints confronting skilled female workers in the Indian construction industry operate at local, state, national, and global levels. It is therefore necessary not only to pose questions about women in the construction industry within the broader societal context, but also to

seek solutions within diverse institutional arenas represented by NGOs, state, and central governments, and domestic and multinational construction companies as well as national and global labour organisations.

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