inclusive cities

IEMS Informal Economy Monitoring Study

Home-Based Workers in Ahmedabad, India

by Darshini Mahadevia, Aseem Mishra and Suchita Vyas

April 2014

Informal Economy Monitoring Study: Home-Based Workers in Ahmedabad, India

Field research for this report was conducted in Ahmedabad between July - November 2012. The Ahmedabad Research Team consisted of: Darshini Mahadevia, Aseem Mishra, Suchita Vyas, Mansi Shah, Kaushal Jajoo, Abhijeet Datey, Tejas Patel and Vishal Darji.

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About the Informal Economy Monitoring Study

The Informal Economy Monitoring Study (IEMS) is a major, longitudinal study of the urban informal economy being undertaken initially at two points in time, 2012 and 2015, in 10 cities around the world: Accra, Ghana; Ahmedabad, India; Bangkok, Thailand; Belo Horizonte, Brazil; Bogota, Colombia; Durban, South Africa; Lahore, Pakistan; Lima, Peru; Nakuru, Kenya; and Pune, India. The study combines qualitative and quantitative research methods to provide an in-depth understanding of how three groups of urban informal workers – home-based workers, street vendors, and waste pickers – are affected by and respond to economic trends, urban policies and practices, value chain dynamics, and other economic and social forces. The IEMS will generate panel data on the urban informal economy.

In each city, a team of five researchers worked in collaboration with a local membership-based organization of informal workers from April 2012 to April 2013 to collect and analyze the first round of the data.

All city research reports, as well as sector reports (one each for home-based work, street vending and waste work), a global report, and other information on the study can be found at www.inclusivecities.org and www.wiego.org.

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Executive Summary

Recent statistics show the majority of workers in developing countries earn their livelihoods in the informal economy. The Informal Economy Monitoring Study (IEMS) is a qualitative and quantitative study designed to evaluate the reality for these workers' lives. With research conducted over multiple years in 10 cities, the IEMS aims to provide credible, grounded evidence of the range of driving forces, both positive and negative, that affect conditions of work in the informal economy over time. Informal workers and their membership-based organizations (MBOs) are at the centre of the analysis.

The Research in Ahmedabad

In Ahmedabad, WIEGO partnered with the Self-Employed Women's Association, the world-renowned trade union of women informal workers. SEWA's members are drawn from a wide range of occupations. As of July 2012, SEWA had 35,049 garment workers and 31,689 *agarbatti* rollers among its membership in Ahmedabad City.

Fieldwork for the study consisted of 15 focus groups, held in 2012, involving 75 home-based workers. Focus groups utilized nine tools, organized around the themes of sector characteristics, driving forces and responses, the institutional environment, and sector contributions to the city. A subsequent survey was administered to 147 home-based workers, which included the focus group participants and an additional 72 home-based workers.

All study participants were members of SEWA. And all were sub-contracted workers. Two sampling variables were used. First, study participants were either garment workers or *agarbatti* (incense stick) rollers. The second variable was whether the home-based workers were working directly through traders or were working through contractors (intermediaries). Location was also kept in mind when selecting the workers, as both availability and economics of work have been impacted for those home-based workers relocated to the city's periphery due to infrastructure projects in the city.

Key Findings

Individual and Household Characteristics

Among the survey participants, family size is larger than the Indian average, but their households have high work participation rates of 60 per cent and hence low dependency rates. While home-based work is the main source of household revenue for only 12 per cent of the survey group, it provides important supplemental income. Two-thirds of participant households rely mainly on informal employment, and only 28 per cent had a member engaged in formal employment. In focus group discussions, the home-based workers revealed that their income was essential to paying for education, food and domestic expenses.

Most of the study participants are married, though a significant number are widows. About 72 per cent of the sample fall between 40 and 59 years of age; just over 3 per cent are in the 20-29 age group. Only 11 per cent are older than 60. *Agarbatti* rolling is mainly done by women in Scheduled Castes or other Backwards Castes (74 per cent), while in our sample, garment work was mainly done by Muslim women (95 per cent) who stated social constraints against going out for work was the main reason for doing this home-based work.

Driving Forces

The survey found that some positive aspects of home-based work drove the women to take up this work. Many participants identified as helpful that they can bring in income working at home, on a flexible schedule, while also taking care of their family and other domestic duties. The financial independence they gained was seen as positive. As well, they noted that little or no initial investment was required to engage in the work. However, the study uncovered several driving forces that impact negatively on home-based workers and their enterprises.

City and State Level Policies and Practices

Among the city and state policies and practices mentioned as negative driving forces, housing emerged as the most significant. Inadequate dwelling space was the most common drawback cited by the workers, for whom their home is also their workplace. A small house hampers the productivity of the enterprise. A worker cannot take bulk work orders as she cannot store raw materials. She cannot work throughout the day on account of competing needs of space within the household or the arrival

of visitors, and other family activities must take place around the work. Often the children cannot sleep in the afternoon due to noise from the sewing machine – some garment workers even send their children to a neighbour's house to sleep.

Poor quality housing was also a concern – roofs often leak and low-lying houses flood, causing damage to the household and goods, including the raw materials. Because the women and their families tend to be low income earners, they cannot afford better housing. About 40 per cent of the study's home-based workers live in rented houses, paying a considerable portion of their income in rent. Those who own their houses, meanwhile, said they live in informal settlements and fear demolition.

Transport issues also emerged as significant for home-based workers, who must travel to obtain raw materials and supply produced goods. Increased public transport costs in Ahmedabad have made it unaffordable, and long distance travel impacts the viability of their enterprises. The garment workers who rely on public transport spend an additional 379 rupees more per month; given that the average monthly turnover for the study's garment workers was 2,337 rupees, this is a significant sum.

Thus, fully 75 per cent of workers reported they walk to get their work orders and raw materials – even when it means hardship, body aches and fatigue. Transport is of particular concern for those who have been relocated to the city's periphery. The women from rehabilitation sites said the volume of their work orders has also greatly decreased – contractors, unwilling to come to the relocation sites to distribute work, do not contact them when work is available.

Garment workers also reported that the high cost and unreliability of electricity poses a problem, as it forces them to rely on manual sewing machines, which do a less professional job, cost more in money and time to maintain, and tire the user.

Occupational Health Hazards

Almost two thirds of the home-based workers surveyed identified hazardous working conditions that impacted their health. In the focus groups, these health hazards also came to the fore. Garment workers noted that they suffer from backache and eye strain. And when manual sewing machines are necessary, they must take painkillers and rest.

A greater percentage of *agarbatti* rollers complained of health hazards – and of larger health problems. The members said that the use of coal powder makes their eyes burn. Many have developed breathing problems since they inhale the toxic powder. In fact, some mentioned that chronic lung conditions develop because of this work. They said that they have to make three to four visits to the doctor in a month to get medicines, which adds to expenditures. The *agarbatti* makers also stated that the work created pollution in the whole house. In addition, having to sit in one place throughout the day leads to body aches.

And when health is impacted, there is little opportunity for respite. When unable to work due to illness or other issues, the vast majority of home-based workers in the study indicated they had no one to take up their work.

Macroeconomic and Value Chain Dynamics

In regard to value chain dynamics, low piece rates were the most-often mentioned by the focus groups. Focus group participants claimed they were not getting fair wages but contractors and traders were making good profits due to home-based workers' labours. In the survey, too, 66 per cent of the workers complained of low piece rates/wages and 50 per cent cited a large variation in income as a significant problem. While 83 per cent said rates go up as a matter of course annually, they reported that they cannot bargain for higher rates as the contractor will threaten to stop giving them work. Worse, some home-based workers said they are not always paid upon delivery of the products or are paid only half of what they are owed, with the other half tied to delivery of the next batch of product. Moreover, garment workers do not receive advances on work orders to cover the related costs of production such as threads, needles, machine oil, and electricity.

The *agarbatti* rollers, in particular, reported very low wages, ranging from 12-15 rupees per 1,000 sticks. For an eight-hour work day, they can make a meagre turnover of about 36 to 105 rupees per day.

Macroeconomic conditions also have an impact. The global recession of 2008 affected, in particular, garment workers, who endured months without work at the height of the crisis and still experience

lower levels of work than previously. This is exacerbated as local demand for readymade garments has dropped due to the pressures of food inflation, which diverts household finances to other things. Almost half of the garment workers surveyed (as compared to just 13 per cent of the *agarbatti* rollers) said that the volume of work they received in the past 12 months had dropped.

Low wages or declining revenue mean that home-based workers cannot fulfil basic family expenses – including food and education – or save to secure their future. The most common response was to reduce personal and household expenses (cited by 78 per cent) and to borrow money (64 per cent). One quarter of *agarbatti* rollers said they prolonged their workday, while garment makers were more likely to say that they needed another household member to take up work.

As with these responses, most responses to negative driving forces were at the individual or household level (for example, using plastic sheets to protect goods from leaks and adjusting work hours). However, a small number – 8 per cent of the women – said that low piece-rates or wages led to collective efforts such as conducting strikes or taking the support of SEWA to negotiate for wages.

Institutional Relationships

When asked about institutions that help their work, almost all the women said that SEWA was helpful to them. This was mostly because SEWA offers assistance in negotiating higher piece-rates, but also because it empowers workers, giving them an identity, and provides services such as training, savings and loans. During focus group discussions, the government-run industry-specific Welfare Boards were also mentioned positively, as were the traders/contractors on whom the women depend for their work and from whom they sometimes are able to access loans.

Contributions and Linkages

Home-based garment workers and *agarbatti* rollers are part of larger value chains. The goods they return to traders and contractors move along the chains to be packaged and sold; a small percentage are even exported. In focus groups, home-based garment workers indicated they play a role providing cheap, readymade garments to the public; *agarbatti* rollers noted their work ensures incense sticks are available for public purchase.

In addition, other workers – from those who wash, iron, fold, and pack garments to the rickshaw pullers, the loaders, and the sewing machine repairers – gain work as a result of the home-based work. Shops that sell sewing materials also depend on the home-based workers, so this sector provides employment opportunities to both formal and informal sectors.

Recommendations

Policy responses to improve the lives and livelihoods of home-based workers must take multiple forms and occur at multiple levels. Housing and transport policies relate most directly to urban planning. However, policy responses dealing with employment relationships – for example, work orders, piece rates, payments, worker benefits – and with social protection are in the labour and social policy realm.

Key Policy Messages

1. Recognize sub-contracted home-based workers as dependent workers in an employment relationship.
2. Recognize that the homes of home-based workers are their workplaces and grant them de facto tenure and basic infrastructure services.
3. Provide housing finance and other housing services to allow home-based workers to upgrade their homes-cum-workplaces and make them more productive.
4. Negotiate more secure work orders and higher piece rates for sub-contracted home-based workers and protect them against arbitrary cancellation of work orders or rejection of finished goods.
5. Negotiate worker benefits and social protection, including health insurance and pensions, for all home-based workers, both self-employed and sub-contracted.

Key Legislative Reforms

1. The Government of India should ratify ILO Convention 177 on Homework (1996), which has been signed but not ratified, and promote the National Policy on Homeworkers, drafted by the Ministry of Labour in 1999/2000 – or new legislation – to reflect the provisions of ILO Convention 177.

2. Sub-contracted home-based workers should be given due recognition as dependent workers under labour laws. Legislation should aim not only at higher piece-rates, better working conditions, and social protection but also skills training and market access.

3. The national government's new housing programme, *Rajiv Awaas Yojana* (RAY), allows people to build their own houses on land provided by local governments. Two important mandatory reforms have been proposed to RAY: 1) to ensure the local government reserves 20-25 per cent of the land or built-up area for the urban poor's residential needs; and 2) to ensure 25 per cent of local government budget is reserved for the urban poor. Both reforms are designed to ensure access to conveniently located lands and finance for housing of the urban poor.

4. Location is also important. In the study sample, home-based workers from households relocated to the city's periphery reported that being at a greater distance from their contractors or traders meant more time and money spent in commuting and fewer work orders.

5. Also, if urban poor households are allowed to construct their own houses, they can set up worksheds in their premises or neighbourhoods so that polluting work, such as rolling *agarbattis*, can be done in areas outside the homes, thus limiting exposure to harmful chemicals and dust for both the worker and other family members.

Key Institutional Reforms

1. **Identity Cards** – Because home based workers are isolated, scattered and lack identity as workers, they should be given identity cards.

2. **Organization & Representation** – Membership-based organizations of home-based workers, both associations and trade unions, should be promoted, recognized and invited to participate in relevant policymaking and rule-setting processes.

3. **Social Protection** - The Gujarat Unorganised Sector Workers Social Security Board, which is expected to provide health benefits, retirement pensions and maternity benefits, should devise a mechanism to register all informal workers, including home-based workers. It should seek the help of membership-based organizations of informal workers, such as SEWA, to register workers with the Board. Also, implementation of the existing health insurance programme, *Rasthtriya Swasthya Bima Yojana* (RSBY), which provides hospitalization coverage up to 30,000 rupees for most diseases requiring hospitalization, should be improved. All home-based workers should be registered in this programme. Further, the procedures to avail of benefits under the various government welfare schemes should be simplified and translated into local colloquial languages.

4. **Minimum Wages/Piece Rates** – The state government's Labour Welfare Department is responsible for setting and monitoring minimum wage rates. Home-based trades should be included in the Minimum Wages Act, and the minimum wage rates should be adjusted to the piece rate system by which most sub-contracted home-based workers are paid. To decide the minimum wages for occupations/trades in the informal economy, the State Minimum Wages Advisory Committee/Board should include representatives of the unions/associations and employers/contractors of informal workers.

5. **Skills Training** – Skill training through the industry-specific Welfare Boards should be expanded and should include continuing education, so that informal workers, especially women, are better able to bargain for favourable piece rates with the traders and/or contractors.

6. **Statistics** – A committee of statisticians should be constituted at the central level for collecting data on the home-based trades and the workers in these trades. Efforts to improve statistics on informal workers/firms, including home-based workers and firms, should be promoted and continued.

Introduction

Study Objectives

It is now widely recognized that the majority of workers in the developing world earn their livelihoods in the informal economy. Advancements in official statistics show that informal employment accounts for more than half of total non-agricultural employment in most regions, and as much as 82 per cent in South Asia and 80 per cent in most of sub-Saharan Africa (WIEGO 2013). In India in 2009-2010, just under 80 per cent of all urban workers (79 per cent of men and 81 per cent of women) were informally employed (Chen and Raveendran 2011). Though many studies offer theories to explain the persistence, characteristics and growth of informal employment, few have evaluated the grounded realities of work in the informal economy – and none have done so over time and across a sufficiently large number of sectors and cities. The IEMS seeks to fill this gap.

More specifically, the study attempts to prove or disprove the hypothesis that the informal sector is not linked to the formal economy, that it is not part of the modern economy and it does not contribute to the city's economy. The objective of the study is to provide credible, grounded evidence of the range of driving forces, both positive and negative, that affect conditions of work in the informal economy over time. The study places informal workers and their organizations at the centre of the analysis, examining not only the impact of these forces but also informal workers' strategic responses to them. It also attempts to prove or disprove the hypothesis presented above. It is based on a collaborative approach between researchers and membership-based organizations (MBOs) of informal workers to monitor, on an ongoing basis, the state of the working poor in three sectors – home-based work, street vending, and waste picking – and also to build the capacity of MBOs to assess and mediate the driving forces that affect their work.

The study is based in 10 cities, as follows:

Table 1 - Local Partners

	Sector(s)	Local Partner
Africa		
Accra, Ghana	Street Vending	Institute of Statistical, Social and Economic Research (ISSER) and StreetNet Ghana Alliance
Durban, South Africa	Street Vending, Waste Picking	Asiye eTafuleni (AeT)
Nakuru, Kenya	Street Vending, Waste Picking	Kenya National Alliance of Street Vendors and Informal Traders (KENASVIT)
Asia		
Ahmedabad, India	Home-Based Work, Street Vending	Self-Employed Women's Association (SEWA)
Bangkok, Thailand	Home-Based Work	HomeNet Thailand
Lahore, Pakistan	Home-Based Work	HomeNet Pakistan
Pune, India	Waste Picking	Kagad Kach Patra Kashtakari Panchayat (KKPKP)
Latin America		
Belo Horizonte, Brazil	Waste Picking	Instituto Nenuca de Desenvolvimento Sustentável de Belo Horizonte
Bogota, Colombia	Waste Picking	Asociación de Recicladores de Bogotá (ARB)
Lima, Peru	Street Vending	Federación Departamental de Vendedores Ambulantes de Lima y Callao (FEDEVAL)

Conceptual Framework

In the IEMS, the term "driving forces" is used to refer to **systemic factors** that may impact, in either positive or negative ways, the occupations or livelihoods of urban informal workers. Three categories of "driving forces" anchor the study. First, the IEMS explores **the economy** as a driving force: that is, the macroeconomic conditions such as inflation, recession, and patterns of growth that may influence working conditions in the informal economy. Second, the IEMS examines **government policies and practice**, specifically, but not exclusively, at the city level, including urban planning and policies, zoning regulations, sector-specific policies, regulatory norms, and urban infrastructure and service delivery. Third, the IEMS considers sector-specific **value chain dynamics**, including the power relations between informal workers and their suppliers and buyers, and the role of intermediaries in the value chain. The framework also allows for the identification of other driving forces, such as migration, that may have a significant impact on working conditions in a particular sector or city.

The IEMS assumes that the impact of these driving forces is mediated by institutions and actors related to the particular sector under study in each city. The study examines a range of institutions including government institutions, civil society organizations, and, fundamentally, MBOs of informal workers. It explores the responses of informal workers to key driving forces in each city, and on the economic, political, and spatial linkages within each sector. Finally, through its sampling design, the study allows for comparisons at the individual level by sex (in cities in which both men and women belong to the partner MBO), employment status, and location of the workplace.

Methodology and Sampling

The IEMS is based on both qualitative and quantitative methods. The qualitative component consists of a participatory informal economy appraisal (PIEA), an innovative method designed to capture systematically the perceptions and understandings of informal workers in their own words, in a focus group setting.[1] Each city team conducted 15 focus groups of five participants each (per sector), in which nine tools – organized around the themes of sector characteristics, driving forces and responses, the institutional environment, and contributions of the sector to the city – were used to generate data related to the conceptual framework. The results of the focus groups were recorded in reports of about 12 pages, on average, immediately after each focus group was conducted, and those reports were then analyzed.

The quantitative component consists of a survey questionnaire administered to the 75 focus group participants per sector, plus another 75 workers for a total of 150 in each city-sector (with minor variation in the sample size in some cities/sectors). The questionnaire is designed to supplement the data collected through the focus groups by collecting information on the household profile and income sources of the workers; the assets profile of the workers' households; detailed information on the enterprise or occupation of the workers; and linkages between the informal economy and the formal economy. The questionnaires were administered using a data-capture tool. It took approximately 90 minutes for each respondent to complete the questionnaire.

Collectively, the focus groups and questionnaires provide data on the context within which informal workers earn their livelihoods and the forces that impact, both positively and negatively, on workers' incomes and working conditions. We are also able to understand how workers adapt their work strategies in the face of these economic, social and institutional forces.

The sampling approach was designed to maintain comparability in the results across the 13 city-sectors, on the one hand, and to allow some flexibility as demanded by local circumstances, on the other hand. To the maximum extent possible, the following principles were followed in every city-sector. Only MBO members were included in the sample.[2]

[1] The methodology was developed collaboratively with Caroline Moser, Angélica Acosta, and Irene Vance, who also trained the city teams in the data collection methods and later in data analysis. PIEA is an adaptation of earlier participatory methodologies developed by Chambers (1994), Moser and Holland (1997), Moser and McIlwaine (1999, 2004), and Moser, Acosta and Vásquez (2006).

[2] Substantively, being a "member" of an MBO means different things in different cities; in some cities it means being formally registered, for example, while in other cities it implies a looser affiliation.

Each sector sample was based on two variables, as follows, where possible:

Table 2 - Sampling Variables				
Sector	**Sampling Variable 1**		**Sampling Variable 2**	
Home-Based Work	**Employment Status**		**Product Category**	
	Self-Employed	Sub-Contracted	Category 1	Category 2
Street Vending	**Sex**		**Location of Workplace**	
	Women	Men	Central city	Periphery
Waste Picking	**Sex**		**Source of Materials**	
	Women	Men	Fixed	Variable

Each city team developed the "best sample possible," based on the sampling variables outlined above. "Best" was defined as (a) the most representative sample possible of the study population of MBO members, and (b) the most sensible, feasible, and locally appropriate sample possible. In cities where the partner MBO maintains an updated registry of members with data on the sampling variables, for example, it was possible to develop a stratified random sample that was statistically representative of the MBO population on the sampling variables; in cities where there was no accurate registry, the city team used a quota sampling approach. In each city, the local researchers worked with the MBO to identify what the best possible sample would be, based on local circumstances.

The second sampling variable – product category for home-based workers, location of workplace for street vendors, and source of materials for waste pickers – was designed to correlate with a degree of vulnerability that stems from sector-specific circumstances. In the street vending sector, for example, vendors who work in the central city are typically more vulnerable to evictions than those who work in the periphery. Each city team identified the best way to operationalize this variable according to local circumstances.

The sampling design was implemented as follows in the city of Ahmedabad.

- All study participants were members of the Self-Employed Women's Association (SEWA) of India.
- In the product category for home-based workers, the garment and *agarbatti* (incense stick) sectors were picked. All the women home-based workers were either working directly through traders or were working through contractors; hence this was taken as a second variable. There was no self-employment category for the home-based workers selected among the SEWA members. Location was also kept in mind while selecting the workers, as there has been impact on work availability and economics of work for those who have been relocated to the city's periphery due to infrastructure projects in the city.

Population and Employment in Ahmedabad City

Ahmedabad, Gujarat is the seventh largest metropolitan city of India, with a city population of 5.5 million in the Ahmedabad Municipal Corporation (AMC) area and 6.4 million in the Ahmedabad Urban Agglomeration (AUA)[3] area in 2011. At one time, the largest share of employment was in the cotton textile industry; however, the city's economic base has changed to less labour intensive industries that demand different skills. The changing nature of the formal economy has had a dramatic effect on the growth of the informal economy.

In 1950 nearly 125,000 workers were employed in Ahmedabad's textile mills; in the 1960s nearly two thirds of industrial production was in textiles. However, while there were 85 textile mills in the city prior to 1985, this number had fallen to 23 mills by 1994 and by 1997, nearly 67,000 textile workers had lost their jobs. Retrenchment from the formal sector resulted in a large share of the labour force being accommodated in the informal sector in the city (Bhatt 2003). For example, there was a consistent increase in self-employment among men in Ahmedabad city, from 34.7 per cent in 1987–88 to 53.6 per cent in 2009–10 (Mahadevia 2012).

[3] The Urban Agglomeration area encompasses all the contiguous areas of the city, including small towns, villages and their contiguous outgrowths.

Concurrently, the proportion of women working, whether as self-employed or regular wage earners increased. After the closure of the textile mills in Ahmedabad, even female unemployment increased because more women were seeking paid work to fill the income shortage in the household . Between 1987–88 and 2009–10, self-employment among women workers increased from 38 per cent to 49 per cent. While the proportion of regular wage employment among women workers has held fairly steady in recent years at around 30 per cent, casual labour among women workers has drastically decreased. The result is that a considerable number of women are engaged in street vending and home-based work in Ahmedabad.

Home-Based Workers Profile

Garment Workers

Home-based garment producers are some of the most invisible workers in the informal sector. In many industries, including garment making, they comprise a sizable proportion of the workforce. Since these producers work within their own homes, they are easily missed in labour force estimates. Further, many home-based producers are women, and women have traditionally been under-counted within labour force statics.

All the industrial activity in the garment sector of Ahmedabad is concentrated more as a sub-contracting system, which runs in an unregulated as well as unauthorized manner. It is unauthorized because the units are operated out of homes; since permission for this land use is not taken, there is also no reporting of the activity to the labour office of the state government. The wholesale and retail markets like Sindhi market, Panchkuva, Kalupur Kotni Ni Rang, M G market, and others have developed in response to the rapidly increasing demand for stitched garments. The primary reason for the sub-contracting units in and around these areas is because of the proximity to the market and a ready supply of labour. Both skilled and unskilled labour are used in stitching, embroidery, finishing and packing. The workers live in nearby areas like Sarangpur, Shahpur, Gheekanta, Gomtipur and Rakhiyal, where again, one can find a high concentration of small units or workshops (figures 1 and 2). They produce the bulk of goods for the domestic garment sector.

A manufacturing unit (Pooja Garments) is famous for its traditional apparel in Navrangpura and has its factory in Dani Limda. The orders are obtained from national and international sources, including the USA, Singapore and Saudi Arabia. Some large local companies – such as Brocade House and Asopalav – operate as design-cum-production houses, sourcing production of garments from a variety of sources within the country. For instance, Asopalavgets orders from the UK and USA as well as many cities within India (Delhi, Mumbai, Kanpur, Nagpur, Pune and Kolkata) and outsources production through inter-firm linkages to big contractors within and outside Gujarat state, including in Delhi and Bangalore. About 80 per cent of the sub-contracting is to firms elsewhere in Gujarat and India and only 20 per cent to local units or workers. Ironically, the 80 per cent involves the maximum value-addition processes (stitching, embellishment and ornamentation) while the 20 per cent sub-contracted to local workers is for the low value-added processes (such as trimming, finishing) (Khurana, Ray, and Unni 2002).

Garment worker doing work at home in Shahpur area. Photo by Aseem Mishra

Agarbatti *Makers*

According to the paper "Fragrance of Hard Work: Women *Agarbatti* Rollers of Gujarat," produced by SEWA in 2000, women who lived in families facing unemployment after the closure of textile mills took to this work to supplement the meagre household incomes. Particularly, in the areas of Bapunagar, Odhav, Rakhiyal, Amraiwadi, Meghaninagar and Naroda, *agarbatti* rolling has now become the main occupation of women in almost every house. In particular in Bapunagar area, there is hardly a single house where this work is not the main income source.

There are two types of *agarbatti* produced in the city; one is oil based and the other is water based. The workers are given raw materials like fine flour, coal, dust, bamboo sticks and brown chemical powder to make *agarbatti*. These ingredients are mixed together to knead dough using either oil or water. Dough is then wrapped in plastic bags to prevent its drying. A bit of dough is rolled onto the bamboo stick to make *agarbatti*, which then is dried. *Agarbattis* that are water based have to be scented, whereas the oil based ones do not require scenting. Once scented, the sticks are then dried again and packed in gelatine paper or boxes for sale.

Even though there are a few *agarbatti* factories in the city, most *agarbatti* rolling work is done at home on piece-rate basis in Ahmedabad. These workers usually live in slum areas, in small one or two-room houses.

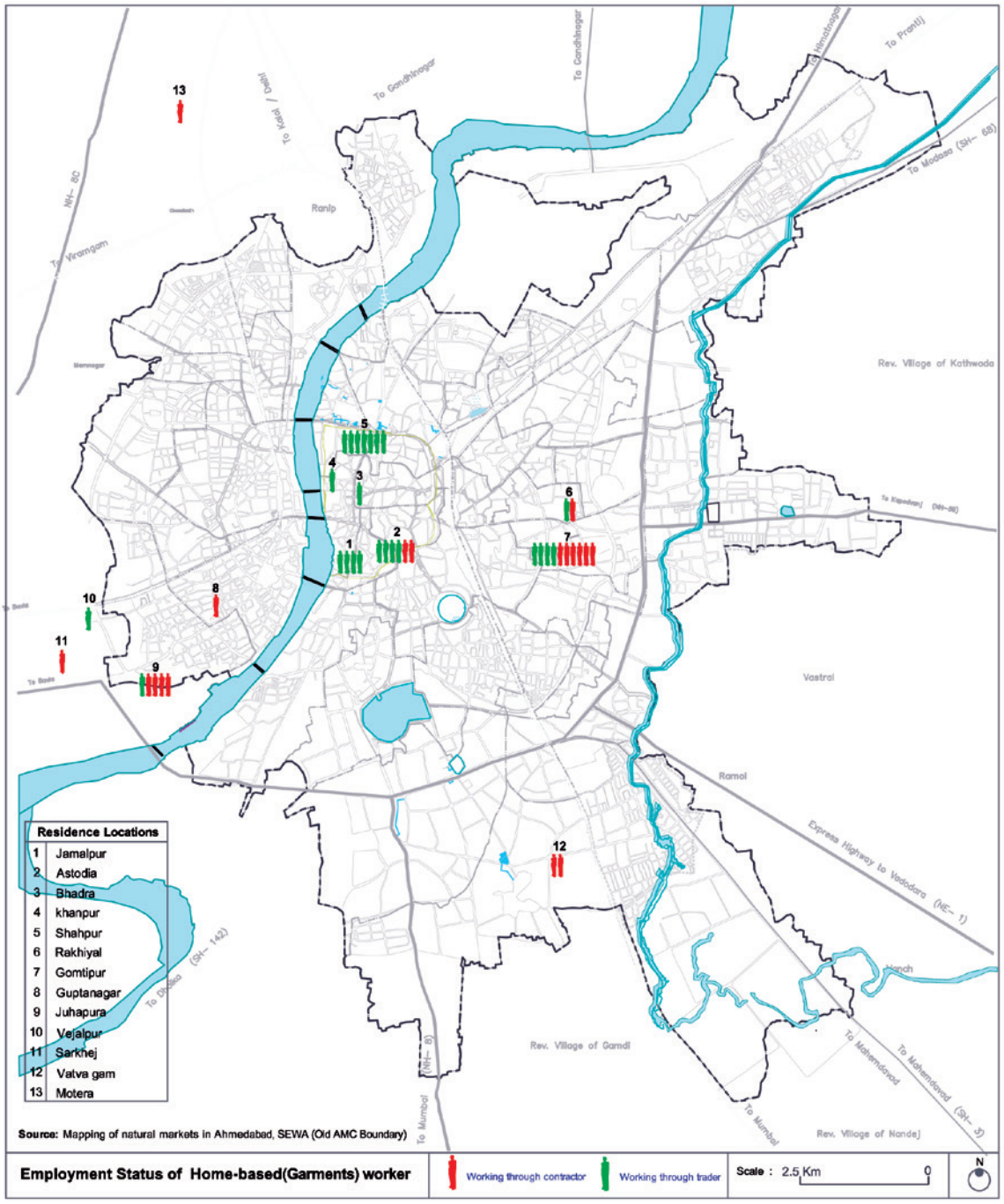
Agarbatti *worker doing work at home in Bapunagar area. Photo by Aseem Mishra*

The trader gives a card every month to the home-based workers, on which the number of *agarbattis* rolled every day is recorded. The name of the worker is written on the card, but the trader's name is not written. Thus, there is no proof of an employer-employee relationship. The trader owns the finished goods, which should be exactly the same weight as the raw material he had given to the worker. The money is paid to the worker on a piece-rate for a thousand sticks. If the weight of finished goods is less or the quality not so good, he reduces the money paid to the worker, based on his own discretion. Rarely can a worker argue or protest against this because she will find it difficult to get any work the next day.

An *agarbatti* worker has to bend down and work on a wooden board for 8 to 10 hours a day in order to roll 5,000 *agarbattis*. This kind of hard labour leads to spinal pain, abdominal pain and pain in the hands and legs. The fine dust enters the nostrils and in the long term can damage the respiratory system and eyes. The dust from the wooden sticks and the scent of the perfume is often suffocating. Also, due to constant friction occurring during the rolling process, the palms get bruised and the skin gets damaged (SEWA 2000).

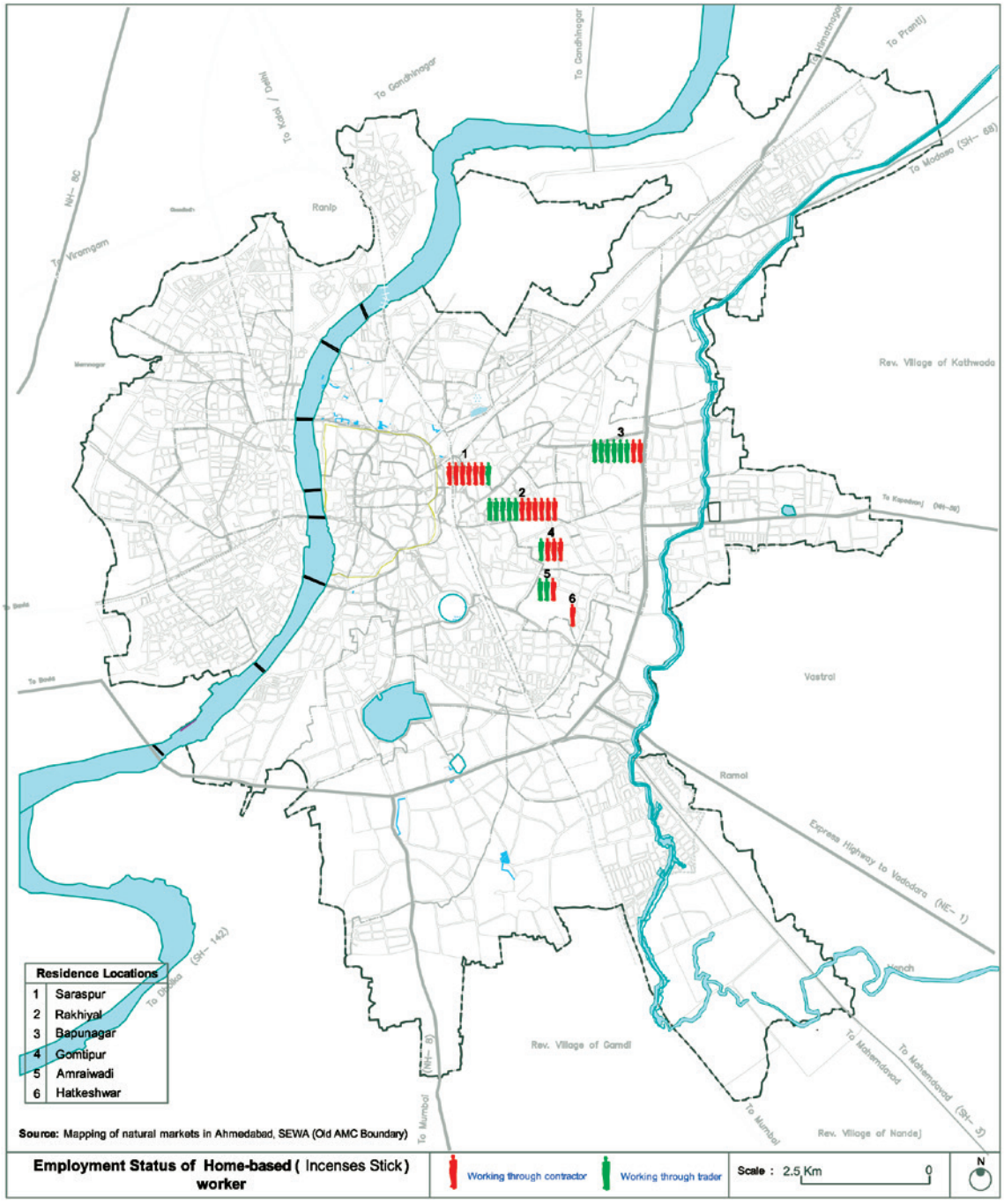
The maps in figures 1 and 2 show the locations of residences of garment and *agarbatti* home-based workers who participated in focus group discussions.

Figure 1 - Settlement Locations of Garment Workers



Source: Derived from all Focus Group discussions

Figure 2 - Settlement Locations of *Agarbatti* Rollers



Source: Derived from all Focus Group discussions

SEWA Profile

SEWA is a trade union, registered in 1972, of self-employed women workers from low income households who earn a living through their own labour or small business. SEWA members do not have regular salaried employment with welfare benefits like workers in the formal sector do. Although around 94 per cent of the workforce in India is informally employed – the percentage is slightly higher for women than for men – this enormous workforce, and especially informal women workers, remains largely invisible, under-counted and under-valued.

SEWA's main goals are to organize women workers for full employment and self-reliance. Full employment means workers obtain work security, income security, food security and social security

(at least health care, child care and shelter). SEWA organizes women to ensure that every family obtains full employment. By self-reliance, SEWA means that women should be autonomous and self-reliant, individually and collectively, both economically and in terms of their decision-making ability.

SEWA's History

SEWA grew out of the Textile Labour Association (TLA), India's oldest and largest union of textile workers, founded in 1920 by a woman, Anasuya Sarabhai. The inspiration for the union came from Mahatma Gandhi, who led a successful strike of textile workers in 1917.

Against the background of activity in industrial relations, social work and local, state and national politics, the ideological base provided by Gandhi and the feminist seeds planted by Sarabhai led to the creation by the TLA of their Women's Wing in 1954. Its original purpose was to assist women belonging to the mill-workers' households and hence its work was focused largely on training and welfare activities. In 1968, a woman lawyer named Ela Bhatt was asked to head the Women's Wing. By that time, classes in sewing, knitting, embroidery, spinning, press composition, typing and stenography were established in centres throughout the city for the wives and daughters of mill workers.

The scope of activities expanded in the early 1970s when a survey was conducted to probe complaints by women tailors of exploitation by contractors. The survey brought out other instances of exploitation of women workers and revealed that large numbers were untouched by unionization, government legislation and policies.

In 1971, Ela Bhatt wrote an article for the local newspaper and detailed the problem of the headloaders. The cloth merchants countered the charges against them with a news article of their own, denying the allegations and testifying to their fair treatment of the headloaders. Soon word of this effective ploy spread and a group of used garment dealers approached the Women's Wing with their own grievances. A public meeting of used garment dealers was called and over a hundred women attended. During the meeting in a park, a woman from the crowd suggested they form an association of their own. Thus, on an appeal from the woman and at the initiative of the leader of the Women's Wing, Bhatt and the president of the TLA, Arvind Buch, the Self- Employed Women's Association (SEWA) was born in December 1971.

The workers felt that as a workers' association, SEWA should establish itself as a trade union. This was a fairly novel idea because the self-employed have no real history of organizing and they do not have any employers. The first struggle SEWA undertook was obtaining official recognition as a trade union. The Labour Department refused to register SEWA because they felt that since there was no recognized employer, the workers would have no one to struggle against. SEWA argued that a union was not necessarily against an employer, but was for the unity of the workers. Finally, SEWA was registered as a trade union in April 1972.

SEWA expanded continuously from 1972, increasing in its membership and including more and different occupations within its fold. In 1981, SEWA separated from the TLA.

SEWA's Structure

SEWA is registered as a trade union under the India Trade Unions Act of 1926. Membership is open to self-employed women workers all over India. The membership fee is 5 rupees[4] per year. The union is governed by two tiers of elected representation. Trade Committees (*Dhandha Samilti*) are formed for each trade at the local level. The Trade Committees vary in size from 15 to 50 members. Each meets every month to discuss the problems of their trade and possible solutions. Trade Council members are members of their respective Trade Committees as well. The organizer of the local Trade Committee serves as its Member Secretary. The members of each trade elect their representatives in the ratio of 1 representative per 100 members. These elected representatives then form the Trade Councils (*Pratinidhi Mandal*).

Every three years, the Trade Councils elect an Executive Committee of 25 members. The trades represented on the Executive Council are those with the largest proportion of SEWA members.

[4] 1 Indian rupee was equal to US $.018 on August 1, 2012 per the mid-market rate reported by www.xe.com. This rate is used for all conversions throughout this paper.

The office-bearers of the SEWA trade union are elected from among the Executive members. It has become a practice to elect the President from the trade with the largest membership.

SEWA Membership in 2012

- All India membership: 1,732,728
- Gujarat membership: 919,712
- Ahmedabad Membership: 396,654

Over the years, the complexion of SEWA's membership has changed significantly. Until 1994, SEWA's membership was predominantly urban. This was partly due to its origins in Ahmedabad. However, in the late 1980s, SEWA intensified its rural organizing, with a resulting increase in membership from rural areas. In 2006, of SEWA's 483,012 memberships in Gujarat, 61 per cent were rural and 39 per cent urban.

Within three major occupational categories, the picture was as follows:

Table 3 - SEWA's Membership by Sector (%)

	Occupational category	Per cent
1.	Hawkers and vendors	9.44
2.	Home-based workers	23.03
3.	Manual labourers - Service providers	67.53

Part 1: Characteristics of Home-Based Workers, Their Households and Enterprises

This report is a synthesis of findings from 15 focus group discussions (FGDs) and 147 questionnaire surveys of home-based workers (HBW) in Ahmedabad. Each FGD consisted of five women who are SEWA members. In the questionnaire survey, all FGD participants and an additional 72 SEWA members took part. Two home-based worker sectors were selected: garment makers and the *agarbatti* (incense stick) rollers. This section of the report provides an overview of the main characteristics of home-based workers and their households.

1.1 Characteristics of Individual Workers and Their Households

The starting exercise was an introductory participatory exercise in which the participants were asked to introduce themselves; the figure below shows the introductions of the participants in focus group 11. The participants offered information about their ages and work profiles.

Figure 3 - Introductory Exercise

Sartaj begum Riyasuddin Saiyed- through contractor **58 years age** **Rakhial** **Stitches garments since 25 years**	**Mansuri shabinabanu subrati bhai** **Directly through trader** **20 years age, stitches garment since 5 years**	
Rajkumari Ramlakhan shakyavar **44 years age** **Incense stick roller since 20 years** **Through contractor**	**Saiyed Afsana Parveen Mohammad** **32 years age, Stitches garment since 15 years** **Through trader**	**Sumitra devi gulabchand gupta** **56 years age** **Incense stick roller since 22 years** **Directly through trader**

Source: Focus Group 11

The average family size of the sample households is 5.4 persons, which is larger than the average household size in India of 4.5. Family size is particularly large among garment producers. A high proportion (93 per cent) of households have at least one more person working, either in the formal or informal sector, in addition to the home-based worker. On average, the ratio of workers to the total household size is 0.6 with two non-working members dependent on three working members. So the dependency ratio is far lower than the all-India average of 0.39. The majority of working members in the households are engaged in the informal economy, reflecting the fact that 94 per cent of the workforce in India is informally employed (table 4).

Table 4 - Basic Household Characteristics, by Product Type			
	Agarbatti rollers	Garment producers	Total
Household size[5]	5.01	5.75	5.41
Ratio of workers to total household size	0.61	0.58	0.60
Percentage with:			
Other workers in the household	94.12	92.41	93.20
Other informal workers in household	75.00	81.01	78.23
Other formal workers in the household	32.35	24.05	27.89
N	**68**	**79**	**147**

Source: Ahmedabad IEMS survey data, home-based workers (2012)

Table 5 shows that 72 per cent of home-based workers fall under the age group of 40 to 59 whereas just over 3 percent of the sample were in the younger age group of 20-29. Only 11 per cent of the home-based workers are in the age group of 60+.

Table 5 - Age of the Home-Based Workers (%)			
Age group	*Agarbatti* rollers	Garment producers	Total
20 - 29	1.50	5.09	3.40
30 - 39	7.39	18.98	13.60
40 - 49	45.55	41.76	43.50
50 - 59	38.16	20.28	28.60
60+	7.39	13.89	10.90
N	**68**	**79**	**147**

Source: Ahmedabad IEMS survey data, home-based workers (2012)

The table below reveals that the majority of home-based workers are married and do this work to meet household expenses. At the same time a considerable number (12 per cent) of widowed women also depend on their work while a small number of divorced or married but living separately women were engaged in this work. Therefore, this sector not only provides livelihood opportunities for the poor but also for other socially vulnerable sections of our society, too.

Table 6 - Marital Status (%)			
Marital Status	Garment	Incense stick	Total
Single	17.72	13.24	15.65
Married	64.56	72.06	68.03
Married, living separately	1.27	4.41	2.72
Widowed	15.19	8.82	12.24
Divorced	1.27	1.47	1.36
Total	**79**	**68**	**147**

Source: Ahmedabad IEMS survey data, home-based workers (2012)

Agarbatti rolling is mainly done by Scheduled Caste (SC) women (57 per cent), while in our sample, garment work was mainly done by Muslim women (95 per cent), who stated social constraints against going out for work as the main reason for taking up this work at home. Jaitunbhen, a SEWA staff member, states, "In our Muslim community, women are not allowed to go outside the four walls of

[5] Total household size of the sample was 796, but here only 782 have been considered due to constraints in the length of the questionnaire – only 10 household members were considered in each sample.

the house to work. It's the garment work that provides an opportunity to Muslim women to earn and support their family."

Table 7 - Caste Wise Distribution of Home-Based Workers (%)			
Caste	***Agarbatti* rollers**	**Garment producers**	**Total**
Upper & middle Castes	8.80	1.30	4.80
Other Backward Castes	16.20	1.30	8.20
Scheduled Caste	57.40	2.50	27.90
Scheduled Tribes	4.40	0.00	2.00
Muslim	8.80	94.90	55.10
Not found	4.40	0.00	2.00
N	**68**	**79**	**147**

Source: Ahmedabad IEMS survey data, home-based workers (2012)

Nearly one quarter of the sample women have no education, another 30 per cent have some primary education, and nearly a quarter have completed primary education (table 8). In general, the workers in the two categories have no or very low educational levels. A higher percentage of *agarbatti* rollers than garment workers have had no education.

Table 8 - Respondent's Level of Education, by Product Type (%)			
%	***Agarbatti* rollers**	**Garment producers**	**Total**
None	30.88	18.99	24.49
Some primary	25.00	32.91	29.25
Completed primary	26.47	22.78	24.49
Some secondary	13.24	10.13	11.56
Completed secondary	2.94	10.13	6.80
At least some tertiary	0.00	2.53	1.36
Completed tertiary	1.47	2.53	2.04
Total	100.0	100.0	100.0
N	**68**	**79**	**147**

Source: Ahmedabad IEMS survey data, home-based workers (2012)

In regard to household composition, the majority of household members are of working age. On average, there are 1.3 children and very few people above 60 years of age in each household of 5.2 members (table 9).

Table 9 - Household Demographic Characteristics, by Product Type			
	***Agarbatti* rollers**	**Garment producers**	**Total**
Number of children[6]	1.11	1.46	1.30
Number of working-age adults	3.73	3.84	3.79
Number of pensioners	0.10	0.25	0.18
N	**68**	**79**	**147**

Source: Ahmedabad IEMS survey data, home-based workers (2012)

[6] Total household size of the sample was 796, but here only 782 have been considered. Due to constraints of length of questionnaire only 10 household members could be considered in each sample.

In the sample, a higher percentage of *agarbatti* rollers (41 per cent) compared to garment workers (33 per cent) have been working in the trade for more than 20 years. Conversely, a higher percentage of garment workers (46 per cent) compared to *agarbatti* rollers (24 per cent) have been working in the trade for less than 10 years. These proportions are explained mainly by the sample selected and no other factors.

Table 10 - Number of Years Engaged in this Work (%)

Engagement in Work (years)	*Agarbatti* rollers	Garment producers	Total
< 10.0	23.53	45.57	35.37
10 – 19	35.29	21.52	27.89
20+	41.18	32.91	36.73
N	**68**	**79**	**147**

Source: Ahmedabad IEMS survey data, home-based workers (2012)

Home-based work is not the main source of earning for the majority of households. But it is an important source of supplemental income. As a woman participant in FG 6 states, "With this income I educated my children, got them married, and our living condition also improved with this extra income. "Informal work by other household members is the main source of income for nearly three-quarters of garment workers and more than half of the *agarbatti* rollers (table 11).

Table 11 - Main Source of Household Income, by Product Type (%)

	Agarbatti rollers	Garment producers	Total
Respondent's informal business/ enterprise/work	11.76	11.39	11.56
Informal work by other household members	55.88	72.15	64.63
Formal sector wage employment (respondent) in public sector	1.47	3.80	2.72
Formal sector wage employment (respondent) in private firm	1.47	0.00	0.68
Formal sector wage employment (other household members) in public sector	29.41	12.66	20.41
N	**68**	**79**	**147**

Source: Ahmedabad IEMS survey data, home-based workers (2012)

Only a small percentage of home-based worker households, especially *agarbatti* roller households, have access to any kind of financial assistance other than their earned income. Only slightly more than 7 per cent of the households receive pensions (old age or widow), under 5 per cent receive education scholarships for children, and under 3 per cent receive government grants. Nearly 14 per cent of garment workers are 60 years or older, of which under 13 per cent are receiving pension (old age or widow pensions). The access to any other assistance programmes is very low for the households with home-based workers. This is in spite of their being members of an MBO. The state of Gujarat is behind in extending social security schemes to the urban poor (Mahadevia 2013) and hence even the MBO members do not have access to any social assistance.

Table 12 - Access to Other Types of Household Income, by Product Type (%)			
(%)	*Agarbatti* rollers	Garment producers	Total
Government grants	4.41	1.27	2.72
Rental income	0.00	1.27	0.68
Retrenchment package	0.00	1.27	0.68
Education scholarship for children	5.88	3.80	4.76
Remittances	0.00	1.27	0.68
Pension	1.47	12.66	7.48
Don't get any kind of assistance	88.24	78.46	83.00
N	**68**	**79**	**147**

Source: Ahmedabad IEMS survey data, home-based workers (2012)

1.2 Characteristics of Individual Enterprises

The home-based workers get work from five different sources. First, some workers get their work from a factory. Second, others obtain their work from an employer who keeps a special centre for giving raw materials to and taking finished goods from the workers; these may be bigger employers who have a large marketing infrastructure, or small employers who supply the goods to different shops or markets. A third arrangement is a variant of the second type, wherein a small entrepreneur receives raw materials from a large manufacturer and then gets workers to work from the small production centre, which can be the entrepreneur's own home or a hired place. The small entrepreneur herself also does the same work. This is largely found in case of *agarbatti* rolling. A fourth way of receiving work is from an employer who is also a shopkeeper. The worker has to go to the employer's shop to get her raw materials and return the finished goods. All these sources of obtaining work are together classified as work from trader. Finally, some workers obtain work orders through contractors who act as agents of an employer and are paid a commission by him. The contractors are middlemen in the supply chain. As per the definition adopted for IEMS research, all five categories of workers fall under the definition of industrial outworker.

Home-based workers are usually assisted by other household members, especially female members, on a part-time basis. Only persons who are working as contractor's paid workers tend to employ their household members as unpaid workers in normal times as in case of garment producers. At the time of peak season, workers engage their household members to help in their work. One worker said, "I like this work too much so I started it when I was only seven years old. I was inspired by my mother, she was also a stitching worker" (FG 1). Moreover, due to lower wages they could not afford paid workers to take up the additional work.

Table 13 - Number of Paid and Unpaid Helpers, by Product Type and Main Buyer (%)					
(%)	*Agarbatti* rollers		Garment producers		Total
	Trader*	Contractor**	Trader	Contractor	
	Last Week				
Percentage with:					
Unpaid family	33.33	14.29	25.00	48.72	30.6
Unpaid non-family	3.03	0.00	0.00	0.00	0.7
Paid	0.00	2.86	2.50	0.00	1.4
No helpers	63.64	82.85	72.50	51.28	67.30
	At the busiest time of the year				
Percentage with:					
Unpaid family	24.24	22.86	30.00	46.15	31.3
Unpaid non-family	3.03	0.00	0.00	0.00	0.7
Paid	0.00	2.86	0.00	0.00	0.7
No helpers	72.73	74.28	70.00	53.85	67.30
N	**30**	**35**	**39**	**40**	**147**

* Trader means the employer, who is directly supplying raw materials either from the manufacturing unit or from the shop
**Contractor is a person who acts as a middleman in the supply chain, supplying raw materials to and then collecting the work from the home-based workers.
Source: Ahmedabad IEMS survey data, home-based workers (2012)

Table 14 reveals that 83 per cent of the workers do not get any support to continue their work in case they were not able to do work due to illness or other reasons. About 97 per cent of *agarbatti* rollers who get their work directly from traders reported a lack of support to continue the work during illness or when other personal reasons interfered with their work. Only 12 per cent of workers get support from other household members who take over their work. A few workers reported that they work more hours after they return to work after a break in order to compensate for the loss. The break in work is on account of either illness or any personal crisis or obligation.

Table 14 - Types of Support When Unable to Work, by Product Type and Main Buyer (%)					
	Agarbatti rollers		Garment producers		Total
	Trader	Contractor	Trader	Contractor	
No support	96.97	88.57	82.50	66.67	83.00
Household member will take over	3.03	5.71	12.50	25.64	12.20
Another informal worker will take over	0.00	0.00	2.50	0.00	0.70
Will work more on return to work after a break	3.03	5.71	5.00	10.26	6.10
N	**33**	**35**	**40**	**39**	**147**

Source: Ahmedabad IEMS survey data, home-based workers (2012)

Part 2: Driving Forces in the Sector

This part of the report discusses the driving forces that have a positive or negative influence on the home-based sector. Participants were asked to identify driving forces and then prioritize them based on the impact these had on their work. Most of the significant driving forces are policies and practices at the city or state level, or dynamics within specific value chains.

2.1 Negative Driving Forces

2.1.1 Macroeconomic Forces

Although the Focus Groups did not prioritize any macroeconomic forces as significant driving forces, some macroeconomic forces with regards to garment makers were mentioned by SEWA organizers during interviews with them. The changing backward linkages in the case of *agarbatti* manufacturing were raised by members of Gujarat *Agarbatti* Manufacturers and Dealers Association (GAMDA).

Devjibhai M. Patel, a member of GAMDA, stated that the rolling stick, locally called (*silli*) comes from the bark of trees (mainly bamboo) that are found in dense forests. He explained that earlier they obtained *silli* material from forests of West Bengal, Chhattisgarh and southern states but these forests have been over-exploited; hence they now have to obtain the this material from Assam, which is much further away. The other raw materials, which are in the powder form, are also from the forests. For example, the basic binding material, which comes from the bark of slow growing evergreen trees, is a forest product. Now, these materials are sourced from Assam. Some materials are also sourced from Bangladesh through West Bengal. However, on the rolling sites in homes, the raw materials emanate a lot of fumes indicating the presence of some chemicals in the powder used for rolling. Some manufacturers also obtain the rolled *agarbatti* itself from China, and the Indian manufacturers only add fragrance to them and then pack them. The rolled *agarbattis* sourced from China are of different sizes; some are made without a stick. The product is finally sold in the local, national as well as international markets. When asked why China does not add fragrance, Mr. Patel replied that the enterprises here have their own brands and fragrances suitable to local tastes and hence they only import un-incensed *agarbatti* from China. The *agarbatti* manufacturers do not disclose the ingredients of their fragrance as this is a trade secret.

As mentioned above, there are two types of *agarbattis*, oil-based and water-based. The former are better as the fragrance is inherent in the oil used and hence these do not require artificial fragrance. Chinese *agarbattis* are machine-made while Indian ones are hand rolled. Indian ones are handmade because of the availability of cheap labour here. A few large manufacturing units have introduced machine-made *agarbattis*. These machines are from Vietnam. However, the Vietnamese machines produce only large *agarbattis*, which are used in Buddhist temples in South-east and East Asia, while Indian *agarbattis* are small. Entrepreneurs have modified the Vietnamese machines to suit Indian requirements. It was also told to us that now there are some units manufacturing *agarbatti* making machines, which we could not verify further.

Jaitunbhen, one of the SEWA organizers, stated that the global recession of 2008 had a significant impact on the garment sector. Then, the garment work was not available for about three to four months in Ahmedabad. Global recessionary effects are still not over, so the amount of work available is still very low. The readymade garment traders we met with mentioned that the garment selling business was low as the local consumer demand was also low on account of high food inflation in the last two years. Household budgets were spent on purchasing essential goods; clothing was secondary to food, water and energy.

2.1.2 City and State Level Policies and Practices

Five areas of city and state policies and practices were mentioned as driving changes: (i) housing, (ii) transport, (iii) relocation, (iv) electricity, and (v) social security. Among these, housing was mentioned most often (21 times). With regard to housing, the small size of dwellings was mentioned as the most important factor that affected them. Generally, housing was a negative driving force on account of its small size and other basic services problems.

Table 15 - City and State Level Policies and Practices				
City/State Level Negative Driving Forces	**R1**	**R2**	**R3**	**Total Frequency**
Housing				
Small houses	6	3	2	11
Poor quality of housing leading to water leakage from roof	3	1	2	6
Flooding during rains and water logging in house	1			1
Transport				
Lack of public transport leading to high travel time		1		1
Transport costs for bringing raw materials			1	1
Lack of affordable transport leading to difficulties in fetching raw materials			1	1
Relocation				
Relocation of housing leading to increased transport cost and decreased work orders	1			1
Relocation leading to lack of transport and inability to collect raw materials for work			1	1
Electricity				
High electricity costs	1	2	1	4
Irregular electricity supply	1		1	2
Social security				
No social security			1	1
Total				**30**

Source: Focus Group discussions

It is important to note that about 40 per cent of the home-based workers are living in rented houses. They pay a considerable amount of their income every month as rent to the landlord. While many workers own their houses, they live in informal settlements and fear demolition. Besides that, the houses are small for undertaking home-based work. The roofs are often not of a permanent nature and hence these leak, causing damage to the household and goods, including the raw materials stored. During one focus group, a woman talked about the increasing housing prices in the city. In her words, "I can only afford 500 rupees as a monthly instalment, but there is no house in that range available in Ahmedabad. My house is in the low lying area and it gets filled with water in rains every year" (FG 11). The houses in low lying areas flood during monsoons causing damage to the raw materials. This also causes disruption in home-based work (figure 7).

Transport issues of the home-based workers also are important as they have to be able to travel to the trader to obtain raw materials and supply produced goods. Long distance travel does not make the entire economic activity viable. Hence, transport has been identified as an important driver for their economic activity. The public transport costs have increased in Ahmedabad and those who have access to public transport find the prices unaffordable. Some participants in our survey have been relocated to peripheral areas of the city, wherein there are either no or poor public transport facilities. The transport costs therefore have increased for them, causing disruption in their livelihood activities. Thus, relocation has also emerged as an important driver for the home-based workers. Electricity supply in Ahmedabad is by a private provider whose prices are high. Hence, the cost of electricity is also an important driver for the home-based workers.

Table 16 - Type of Arrangement for the Dwelling (%)			
	Garment producers	*Agarbatti* rollers	Total
Owned	60.74	60.30	60.50
Rented	37.96	39.70	38.80
Other	1.30	0.00	0.70
N	**79**	**68**	**147**

Source: Ahmedabad IEMS survey data, home-based workers (2012)

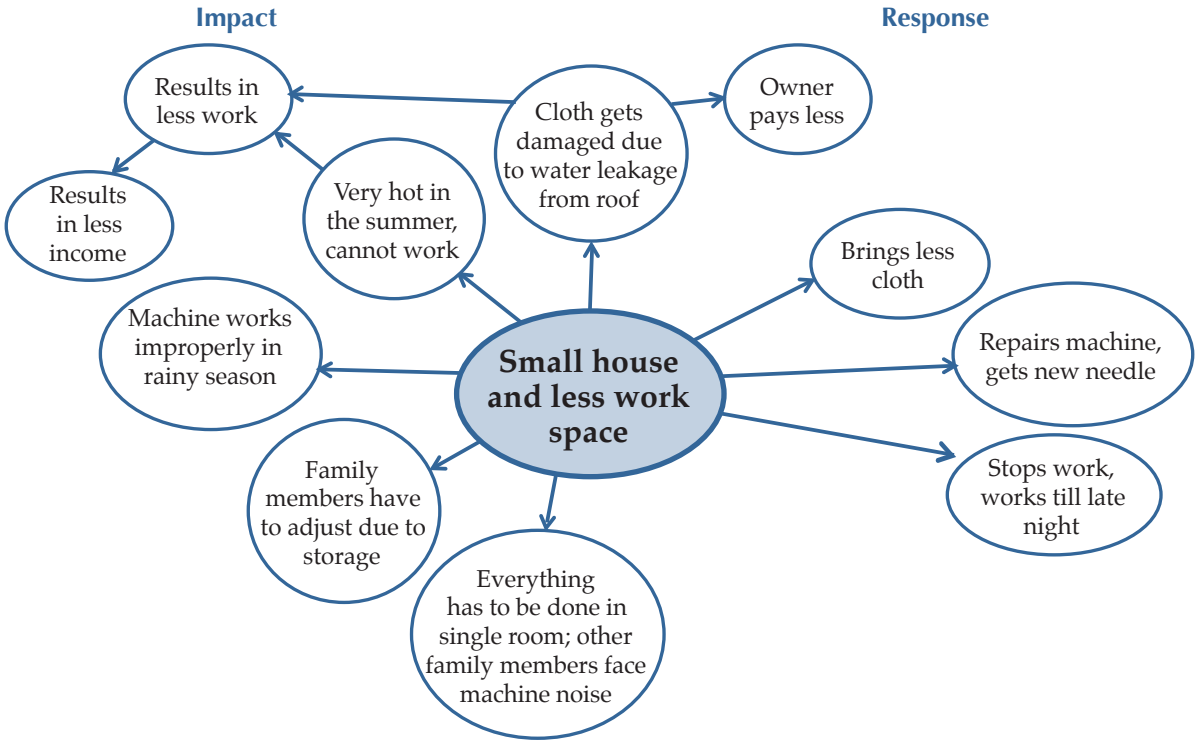
Table 17 reveals that 51 per cent of workers live in a one-room dwelling unit while another 37 per cent live in two-room dwellings. An *agarbatti* roller stated, "My house is too small to do home-based work, also making of *agarbatti* is a very messy process which makes the whole house dirty and black" (FG 11). More than half (57 per cent) of the households live in semi-*pucca* houses, which affects their work during rainy season. One of the participants said, "We have to stop work during monsoons when our roof leaks and damages the goods" (FG3). As per table 17, 78 per cent of the workers have a toilet either inside or outside their house, 22 per cent use a public toilet, and less than 1 per cent have to defecate and urinate in open areas.

Having a small house affects life and work in a number of ways. The workers cannot take bulk work orders as they cannot store raw materials in bulk. Secondly, they cannot work throughout the day on account of competing needs of space by other household members and activities. Due to space constraints, all the family members cannot eat together as the stitching cloth is stored in the same room, as in the case of garment makers. The children cannot sleep properly in the afternoon due to the noise of the sewing machine. Some garment workers send their kids to a neighbour's house to sleep. The noise affects the sleep of other members of the household. The work gets disturbed when guests visit their home. Even when guests visit other household members, their work gets disturbed.

Table 17 - Housing Condition (%)						
No. of Room	Household	Toilet	Household	Material	Roof	Walls
1	51.05	Inside	53.05	Bricks		96.60
2	36.74	Outside and private	24.48	Cement block/ concrete	38.10	0.00
3	5.41	Outside & shared with other households	21.78	Corrugated iron/ zinc	34.01	0.00
4	5.41	Other	0.70	Wood	0.68	0.00
5	1.40	-	-	Mixture of mud and cement	0.68	1.36
-	-	-	-	Tile	1.36	
-	-	-	-	Thatching	0.68	0.00
-	-	-	-	Asbestos	23.13	0.68
-	-	-	-	Other	1.36	1.36
Total	**100.00**	**Total**	**100.00**	**Total**	**100.00**	**100.00**

Source: Ahmedabad IEMS survey data, home-based workers (2012)

Figure 4 - Linkage with Housing



Source: FG 2

Large proportions (79 per cent) of home-based workers get work orders from near their residence: they walk or use public transport. One fifth of the workers get their work outside the settlement: they also walk or use public transport. In all, 75 per cent of workers walk to get their work orders/raw materials. One of the participants reported that her children bicycled to get the raw materials.

Table 18 - Location of Work and Mode of Travel

Location of work	No. of workers	%
Get material within/nearby settlement	59	78.67
Get material outside the settlement	16	21.33
Total	**75**	**100.00**
Mode of travel	**No. of workers**	**%**
Walking	56	74.67
Public transport	12	16.00
Private transport (bicycle)	1	1.33
Get material at house itself	6	8.00
Total	**75**	**100.00**

Source: Ahmedabad IEMS survey data, home-based workers (2012)

Transport and Relocation

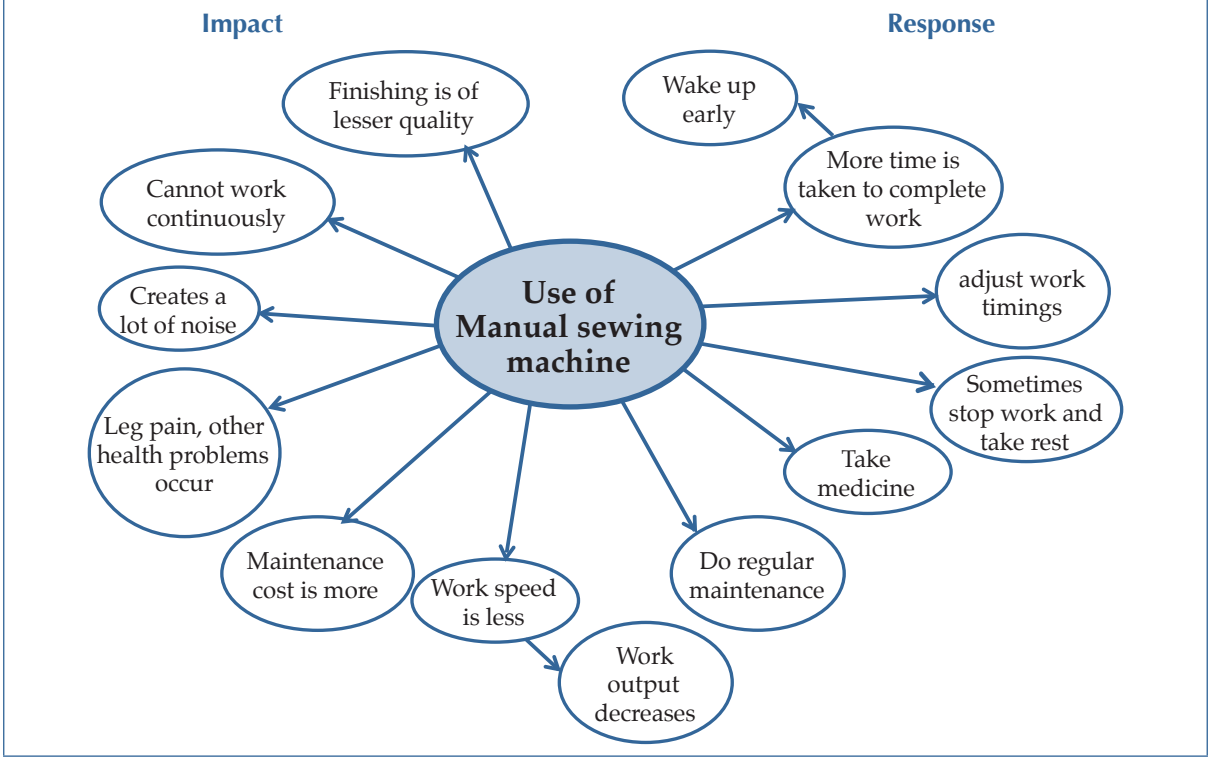
Transport is, in general, an important mobility concern for all workers. The problem is lack of affordable public transport. This results in them walking to the trader or the contractor's place to get raw materials. Some of them send their children by bicycle to collect raw materials. Otherwise, they have to hire an auto rickshaw to do so. Even if they share a rickshaw, the costs are very high, about 20 rupees per trip. As participants in FG 3 explained:

> "Because there is no public transport, we have to walk to the contractor's place. While coming back, we have to carry the raw materials. In the monsoons, we face a lot of problems."
>
> "From carrying the goods, we get tired and get body aches. We have to sit on the roadside for some time and take rest. Otherwise, sometimes, we get our children to collect the goods."

Transport is of particular concern for those who have been relocated on the city's periphery to make way for various infrastructure projects and urban renewal schemes. For them, the transport cost has increased to 100-125 rupees for bringing raw material from the contractor, which is unbearable. The women from rehabilitation sites said that the volume of work orders has greatly decreased as contractors do not contact them even if work is available as they cannot deliver on a timely basis. The contractors are not willing to come to the relocation sites to distribute work.

There are delays in getting transport: hence, the workers often reach the contractor's place too late when raw materials are no longer available. When they leave early in the morning to go to the contractor's place, the transport delays might lead to their not being back in time at home to send their children to school.

Figure 5 - Impact of Manual Sewing Machine



Source: FG 15

Another major problem raised by the women was the need to use manual sewing machines when the cost of electricity becomes unaffordable. The women reported that when they continually use manually-operated sewing machines for a length of time their legs begin to pain, other health problems occur and they cannot work continuously. Also, when they use manual sewing machines, the finishing of the garment is of inferior quality, the speed of work decreases, affecting both the quality and quantity of output. Moreover, manual sewing machines create a lot of noise, and require much more maintenance. Various responses to the above mentioned problems were reported during the focus group discussions. Two women said that they wake up early and start the work to extend work timings as more time is required to do a less amount of work. One woman said that she spends more on regular maintenance (like oiling) of the sewing machine, to ensure its smooth functioning, but this takes additional cost. As per table 25, about 16 per cent of the garment workers considered electricity costs as a major obstacle for their work. Irregular electricity supply leads to a vicious cycle. Work stops, they get stressed and irritated as a result, they are unable to deliver goods on time and they are not paid on time. When the situation gets very bad, they start using the pedal machines.

2.1.3 Value Chain Dynamics

The several factors mentioned as driving forces within the value chain were divided into two broad groups, factors affecting the sector and factors affecting individual workers. There are three broad sets of factors that affect the sector: (i) economic, (ii) environmental legislation, and (iii) labour regulations. Seven dimensions of value chain dynamics were mentioned as driving change or otherwise having an impact on the workers at an individual level, notably: (i) economic, (ii) raw materials' access, (iii) finance, (iv) technology causing displacement, (v) lack of access to technology, (vi) occupational hazards, and (vii) lack of labour standards. Technology causing displacement is a problem for the *agarbatti* workers whereas lack of access to new technology is a problem for the garment workers.

On the whole, 17 macro or sectoral level factors were mentioned as drivers of change within the value chain and another 17 were mentioned as factors of a value chain affecting individual workers. The main sectoral level issues are economic in nature, in which low piece rates were mentioned 11 times. The next important sectoral issue was lack of implementation of environmental legislation and hence workers inhaling toxic fumes was found to be a major issue. However, this factor was stated only by the *agarbatti* workers. At the individual level, many factors were stated as driving factors affecting the value chain dynamics in which lack of access to finance for new technology (4 Focus Groups), occupational health hazards, technology causing displacement in *agarbatti* making and lack of access to technology in garment making were important factors.

Table 19 - Value Chain Dynamics

Value Chain Negative Driving Forces	R1	R2	R3	Total Frequency
Wages and income				
Low piece rates/wages	5	4	2	11
Lack of timely payments of remuneration			2	2
Lack of advance from contractors			1	1
Raw materials				
Poor quality raw materials		1		1
High ancillary materials' cost			1	1
Multiple visits to contractor for raw materials			1	1
Finance				
Lack of finance for new technology		2	2	4
Technology				0
Risk of displacement by new technology		1	1	2
Lack of access to new technology			2	2
Occupational hazards				

Table 19 - Value Chain Dynamics (continued)				
Value Chain Negative Driving Forces	**R1**	**R2**	**R3**	**Total Frequency**
Health hazard due to inhaling of toxic materials for *agarbatti* workers	2	1		3
Occupational health hazards, e.g. backache, leg pain,		2	1	3
Lack of labour standards				
Forced to work during holidays and vacations		1		1
No yearly bonus			1	1
Cannot look after family as they are at factory		1		1
Total				**34**

Source: All Focus Group discussions

Income

As per table 20, 66 per cent of workers felt low piece rates/wages, and about 50 per cent considered large variation in income, as the main problem faced by them. A far larger proportion of garment workers (41 per cent) than *agarbatti* workers (10 per cent) reported competition in their work as the main problem.

Table 20 - Reported Problems Related to Product Markets and Competition, by Product Type (%)			
	***Agarbatti* rollers**	**Garment producers**	**Total**
Too few customers of materials or goods	0.00	0.00	0.00
Large variations in sales/income	36.76	60.76	49.66
Low piece rates	66.18	66.67	66.44
Customers reject products	13.24	3.80	8.16
Don't know what customers want	0.00	0.00	0.00
Customers don't pay their debts	0.00	2.53	1.36
Distance from markets	1.47	11.39	6.80
Too many competitors	10.29	40.51	26.53
N	**68**	**79**	**147**

Source: Ahmedabad IEMS survey data, home-based workers (2012)

The average monthly turnover of *agarbatti* makers was found to be 1,538 rupees compared to 2,336 rupees for garment workers. The workers who get work directly from traders earn more than the workers who get work through contractors in both the trades. On average, the earnings of *agarbatti* rollers are lower although they work about 11 hours more in a week than the garment workers. Both types of workers get work 10 to 11 months in a year. It was reported that workers face difficulty in getting work mainly in the months of monsoon. Further, *agarbatti* rolling is not possible during monsoon as the rolled sticks cannot be dried in monsoons, plus there are problems storing the raw materials in this season. An *agarbatti* roller said:"We don't get work during rainy seasons and if we get, could not complete the assignment because water leaks in our house" (FG 8).

Earnings vs. Turnover

The data presented in this report was generated through a question designed to capture ***turnover*** – that is, the total value of sales or payments for pieces. They **do not** take into consideration the costs incurred in generating these payments. The literature on income clearly establishes that it is very difficult to capture distinctions between turnover, gross earnings, and net earnings reliably. As with similar studies, these data should not be taken out of context and should be interpreted with caution.

Data on turnover from all cities included in the IEMS study showed very high standard deviations and means that far exceeded medians. Means (rather than medians) for turnover are presented in the IEMS city reports.

Table 21 - Turnover and Working Hours, by Product Type and Main Buyer (%)

	Agarbatti rollers			Garment producers		
	Trader	Contractor	Total	Trader	Contractor	Total
Mean monthly turnover(Rupees)	1,658.81	1,424.85	1538.39	2,555.50	2,112.56	2,336.83
Average hours per week (last week)	37.54	31.42	34.39	26.55	20.23	23.43
Average months per year	10.69	11.20	10.55	10.32	10.82	10.56
N	**33**	**35**	**68**	**40**	**39**	**79**

Source: Ahmedabad IEMS survey data, home-based workers (2012)

It is important to note that *agarbatti* rollers do not have to spend any of their own money to buy raw materials or equipment in order to get work. Although garment workers had higher turnovers, on an average, than *agarbatti* rollers, the garment workers also spend a considerable amount on the purchasing of materials like thread, needles, machine oil, and electricity for running their sewing machines. It is estimated that garment workers who do not use transport services spend one-fourth of their turnover on work-related costs, while those who use transport services spend an additional 379 rupees more per month on average. Only two *agarbatti* rollers among the sample reported transport expenses of 170 rupees per month for accessing raw material and delivery of *agarbattis*.

Table 22 - Mean Monthly Expenditure (Rs) on Business Expenses, by Product Type

	Agarbatti rollers (N)	Garment producers (N)	Total (N)
Materials	0	380 (79)	380 (79)
Electricity for running sewing machine	0	230 (57)	230 (57)
Maintenance of sewing machine	0	103 (71)	103 (71)
Transport	170 (2)	379 (23)	362 (25)

Source: Ahmedabad IEMS survey data, home-based workers (2012)

One of the biggest problems identified by respondents was the low piece rates paid by the contractors and owners. They felt that as compared to the amount of hard work that they had put in, they were being paid too low wages. Consequently, they cannot fulfil the needs of their families. They have to reduce their food consumption, they cannot afford to send their children to private schools or to hire private tutors, and they cannot save to secure their future. They reported that they cannot bargain for higher rates as the contractor threatens to stop giving them work. Sometimes they are paid only half of what they are owed, with the other half tied to the delivery of the next batch of products. Sometimes, they are not paid upon delivery of the products. Moreover, garment workers do not receive advances on work orders to cover the related costs of production such as threads, needles, machine oil, and electricity.

In the case of *agarbatti* rollers, if they get their work through contractors, they are paid even less. Their wages range from 12-15 rupees per 1,000 sticks. For an eight-hour work day, they can make a turnover of about 36 to 105 rupees per day, which is lower than the minimum wage, or 3,000 to 7,000 rupees per month.

Box 2: Garment Piece Rates & Production Rates

Tunic or kameez –7 rupees per piece, 20 per day with family help brings 140 rupees per day.

Kameez/ Punjabi –6 rupees per piece, 30 per day brings 180 rupees per day.

Salwar –6-7 rupees per piece, 12 per day brings 72 to 84 rupees per day

Petticot / Chania –2 to 2.25 rupees per piece, 12 per day, brings 24 to 27 rupees per day.

Cushion cover –10 rupees per dozen, and they do 5-6 dozen per day, brings 50 to 60 rupees per day.

Lehnga –40 rupees per dozen, 6 dozen per day with help of three other family members brings 240 rupees per day.

Shirt/ Pants –10 rupees per piece, stitching of 10 shirts or 8 pants brings 80 to 100 rupees per day.

Frock –120 rupees per dozen, stitching two dozen per day brings 240 rupees per day.

Stitching lace around handkerchief –2 rupees per dozen, making 20 to 25 dozen in a day brings 40 to 50 rupees.

Pillow cover –10 rupees per dozen, stitching 5 to 6 dozen in a day, brings 50 to 60 rupees per day.

Transport delays might lead to their not being back in time at home to send their children to school.

Source: Derived from all Focus Group discussions

Although the piece rates of workers is being revised every year or alternate year before *Diwali* festival, one third of the workers reported that their revenue has fallen in the last 12 months. About 50 per cent of garment workers who get work through traders revealed that their revenue has fallen in the last 12 months. Probably it is because their work quantity reduced considerably irrespective of regularity or irregularity of work availability. One third of the workers revealed that they would have liked more hours than they worked in the last week.

Table 23 - Earnings and Work Stability, by Product Type and Main Buyer (%)

	Agarbatti rollers		Garment producers		Total
	Trader	Contractor	Trader	Contractor	
Revenue fallen over past 12 months	18.18	17.14	47.50	35.90	30.6
Would have liked more hours	18.18	28.57	35.00	53.85	34.7
Have a second job	15.15	8.57	17.50	5.13	11.6
N	**33**	**35**	**40**	**39**	**147**

Source: Ahmedabad IEMS survey data, home-based workers (2012)

Only 17 out of 147 workers (12 per cent) have secondary work and those who do are actually engaged in secondary work only for a few months of the year, when either they don't get work in their main activity or when, in certain seasons, there are opportunities to earn more. However, over half of the home-based workers sampled reported that they undertake seasonal work like selling religious idols, *rakhi*[7], firecrackers and work as housemaids in neighbouring communities. Many of the women stated that they hardly find time for secondary work as they already work 8 to 10 hours per day cooking, cleaning, minding children and more in their own house.

[7] *Rakhi* is a holy thread tied to brothers on a special occasion called *Raksha Bandhan* by their sisters.

Table 24 - Type of Second Work Activity, by Product Type (%)			
	Agarbatti rollers	Garment producers	Total
Selling goods for sale	0.00	22.22	11.76
Producing goods for sale	12.50	11.11	11.76
Services	25.00	11.11	17.65
Wage earner	0.00	11.11	5.88
Other	62.50	44.44	52.94
N	**9**	**8**	**17**

Source: Ahmedabad IEMS survey data, home-based workers (2012)

2.1.4 Other Negative Driving Forces

A large share of the home-based workers expressed problems with inadequate space, both for doing their work and for storing goods in their houses (table 25). However, health hazards caused by the work were identified as the most significant problem. Almost two thirds of the home-based workers surveyed identified hazardous working conditions that impacted health as a problem. Rolling of *agarbatti* was identified as hazardous for the health by 74 per cent of workers while 58 per cent of garment workers also thought their work was hazardous. In the focus groups, these health hazards also came to the fore. Garment workers stated that they have backache and eye strain, and when manual sewing machines must be used, after a few days of work, they take painkillers and rest. A woman said, "My legs pain, and my feet swell. I am not able to do work for at least three-four days in a month and there is loss of income for those days"(FG 15). Moreover manual sewing machines create a lot of noise.

The *agarbatti* workers however, face much larger health problems. The members said that the use of coal powder makes their eyes burn and also many of them have got breathing problems since they inhale powder while breathing. The members also mentioned that many workers have contracted chronic lung conditions because of this work. They said that they have to make three-four visits to the doctor in a month to get medicines, which adds to their expenditures. Also, having to sit at one place and constantly work throughout the day leads to body aches.

Table 25 - Reported Problems with Infrastructure and Institutional Obstacles, by Product Type (%)			
	Agarbatti rollers	Garment producers	Total
Poor access to infrastructure (electricity, water, lights)	5.88	11.39	8.84
Cost of infrastructure (electricity, water, telephone)	1.47	16.46	9.52
Inadequate work space	26.47	49.37	38.78
Expensive rent	4.41	1.27	2.72
Inadequate or lack of storage space	10.29	39.24	25.85
Inadequate access to toilets or rubbish removal	8.82	5.06	6.80
Occupational hazards affecting safety of workers or self	73.53	57.69	65.07
Treatment by the local authority	0.00	2.53	1.36
N	**68**	**79**	**147**

Source: Ahmedabad IEMS survey data, home-based workers (2012)

Various responses to the occupational health problems encountered by the home-based workers were revealed during the discussion (figure 6).

Figure 6 - Impacts of and Response to Health Hazards

Source: FG 6

2.2 Positive Driving Forces

A vast number of study participants identified their work as helpful because they can do it at their house, so they can earn a livelihood while also taking care of their family and other domestic duties simultaneously. One of the participants said, "I support my family and can buy things as per my wish. I would not depend on my husband for anything"(FG 4). Flexible timing was another important positive driving force for this work. In FG 3, one of the participants said, "We work according to our own timings; we finish the household work and work at night. By doing this we can also take care of our family and if there are any guest coming we can take care of them, too."

The initial low investment or no investment to engage with this work was also considered a positive driving force for this work. As one woman stated, "To do this work we don't have to put in a single penny."

Table 26 - Positive Driving Forces				
Positive Driving Forces	**R1**	**R2**	**R3**	**Total Frequency**
Value Chain Dynamics				
Bonus in Diwali			1	1
High seasonal demand			1	1
Income contributing to household needs	7	2	3	12
Can work from home	4	3	2	9
Time flexibility	2	2	1	5
No capital costs	1	3	1	5
No commuting costs			1	1
Ease of entry - low or no education possible			1	1
City/ State Policies and Practices				
Benefits from welfare board		1		1
Others		1	1	2
Are able to multi-task such as look after the house, guests, children and work	2	3	2	7
Financial independence		5	3	8
Can train children to do this work	1		1	2
Preferred type of work	2		1	3
Increase in respect within family	1			1
Organizational support for welfare board registration	1			1
Organizational support for wage bargaining			1	1
Total				**61**

Source: All Focus Group discussions

2.3 Responses to Negative Forces

The previous section has presented the analysis of the various difficulties reported by the home-based workers in the focus group discussions. At this stage, participants were asked the impacts of prioritized negative driving forces on their work and how they respond to sustain these forces. This section presents their responses to these difficulties (table 27). This is followed by an examination of the various actors/institutions that help or hinder these responses to the difficulties.

2.3.1 Responses to State/City Level Driving Forces

From the analysis of the previous section, four difficulties have been identified as the most important ones, (i) small houses/inadequate space, (ii) poor quality houses that lead to roof leaks, (iii) low piece rates/wages and (iv) transport, which is of greatest importance to those who have been relocated to the city's periphery on account of large infrastructure projects in the city (table 27). The groups shared 15 responses undertaken to address the problem of small houses and inadequate space, which leads to an inability to do work when desired, affecting the quantity of work produced and reducing overall income. The participants have often combined their responses to small houses along with responses to leaking roofs in monsoons.

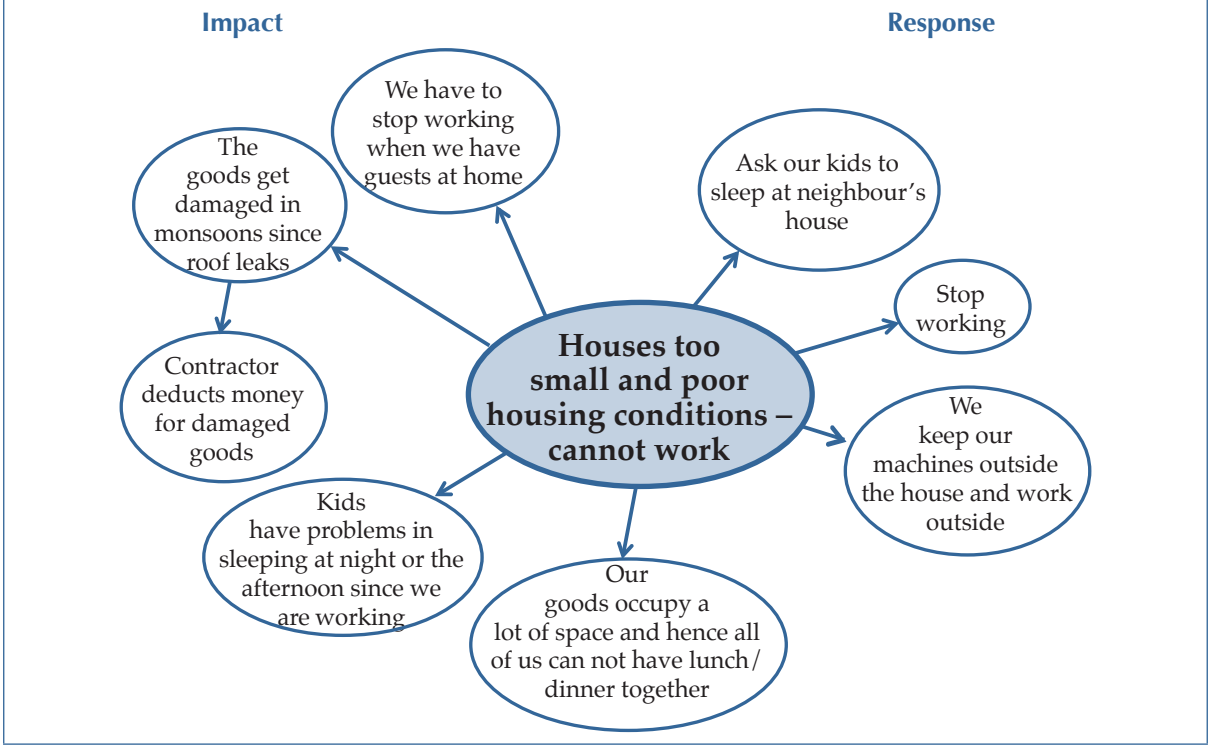
Table 27 illuminates on the responses of the workers to the driving forces. Most of the responses were at an individual level in both city level and value chain driving forces (57 per cent); 35 per cent were at the household level and included things like reducing household expenses and taking help from family members. Low piece-rates or wages was the only problem that led to collective efforts, such as conducting strikes or taking the support of SEWA to negotiate for wages (8 per cent).

Table 27 - Frequency of Responses to Difficulties by Actors/ Institutions					
Difficulty	**Response**	**Individual**	**Household**	**Collective**	**Total**
City level					
Small houses	Adjust work times according to family members' convenience	4			4
	Bring less work	1			1
	Stop work	1			1
	Ask kids to sleep in neighbour's house		1		1
	Keep machines outside the house and work	1			1
	Do work at other's house	1			1
	Work in a workshop	1			1
	Engage other household members to work		1		1
	Work longer hours	1			1
	Do other work	1			1
	Reduce household expenses		1		1
	Take loans on account of inability to do adequate work	1			1
Poor quality of housing leading to water leakage from roof	Put plastic sheets on the roof		1		1
	Plug the doors to keep flood waters out		1		1
	Protect goods by plastic sheets	3			3
	Do more work at other times to compensate the loss	1			1
	Close down the work	1			1
	Repair machine and buy new needles due to damage caused by rains	1			1
	Stop working	2			2
	Borrow money from neighbours to cover for loss during rains		1		1
Transport	Take private auto rickshaws	1			1
	Send kids to get the goods		1		1
	Leave early from home to be prepared for longer travel time	1			1

Table 27 - Frequency of Responses to Difficulties by Actors/ Institutions (continued)					
Difficulty	**Response**	**Individual**	**Household**	**Collective**	**Total**
Value chain					
Low piece rates	Cut on household expenses		1		1
	Access government health facilities instead of private		1		1
	Take loans		4		4
	Do other work	6			6
	Reduce spending		1		1
	Withdraw children from school		1		1
	Engage other household members in work including children		4		4
	Adjust work hours	1			1
	Ask SEWA to bargain wages			3	3
	Increase hours of work	2			2
	Organize strikes, talk to labour department			1	1
Total		**31**	**19**	**4**	**54**

Source: All Focus Group discussions

Figure 7 - Impact of and Response to Small and Poor Quality Houses



Source: FG 1

As per table 17, participating women generally live in single room houses (51 per cent). On top of that, the house roof is generally of temporary materials, such as tin or asbestos sheets, which leak during monsoons (57 per cent). The response to both these problems of housing, as revealed by the FG1 (figure 4) has been to stop working when the house feels too crowded, such as on arrival of guests, or when rain leaks during the monsoons. Small and inadequate houses also mean the children were affected as they could not sleep on account of work going on. One response was to send children to sleep in a neighbour's house in the afternoon. In better weather, women would put their machines outside the house and work so that other activities could be carried on within the house.

Lack of space also means that sometimes workers avoid taking much work due to space constraints as they could not store sufficient raw materials at home. This in turn, means that they are able to do less work and have lower incomes. To achieve their daily work targets,they have to work during odd hours, mostly at night. One woman stated, "Usually I do stitching by 9 o'clock at night, but at that time I worked by 12 o'clock at night" (FG4).

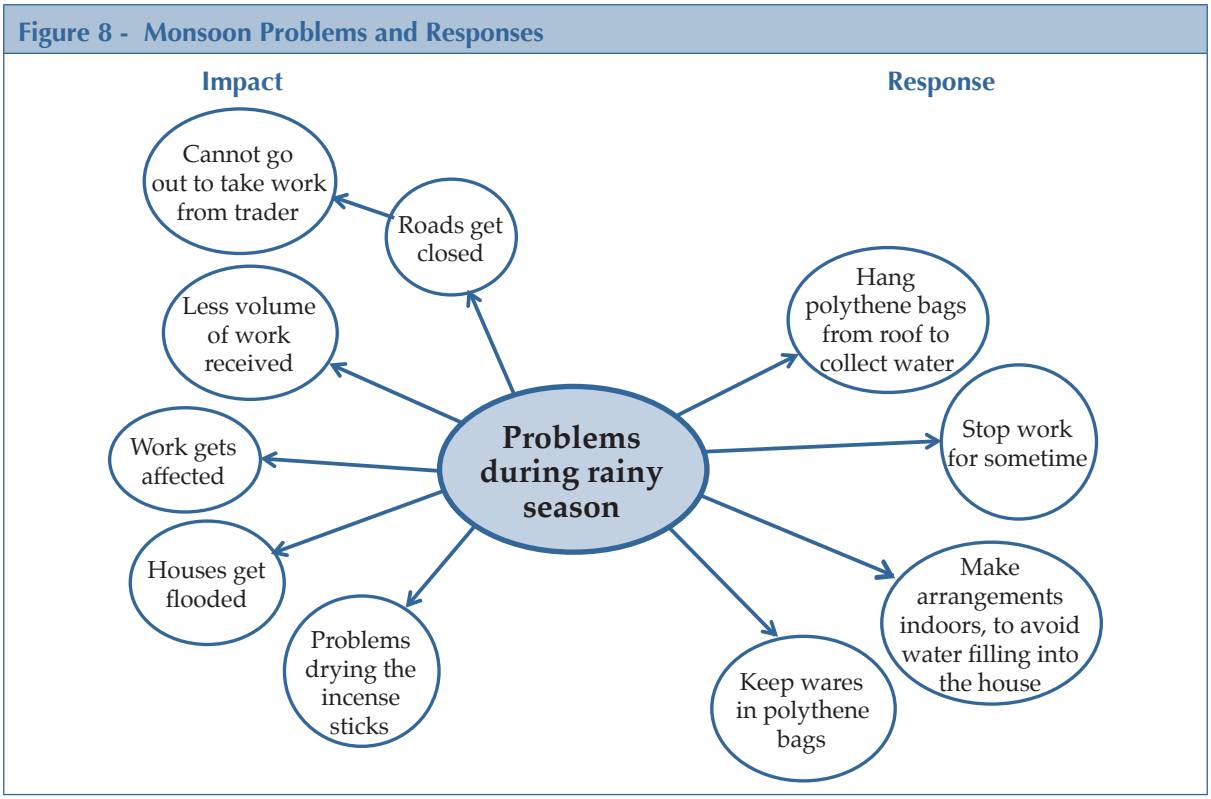
To compensate for loss of income, the women also put other family members to work helping them. Some women have taken to either doing more work, which means that they have to go repeatedly to the trader/contractor to get work, or take up some other work. If none of these options are possible, then they are left with no choice but to reduce household expenses.

To secure the raw materials from rain water, they cover it by using plastic sheets. In case of emergency, they have to work at another's house, likely the home of a relative, friend or neighbour. To overcome income loss, they borrow money from neighbours or friends. One woman said, "I borrow money from my neighbour and return it to them when I get my wage" (FG4).

Because the space is required for many activities, the family members cannot have lunch together. The *agarbatti* makers also stated that the work was such that it created pollution in the whole house. Some of them have therefore shifted to working in nearby workshops.

It can be seen in figure 4 and table 25 that all the responses are at either the individual or household level. Those in trouble have to take care of their problems as there is no other option available. Further on, in the discussion on the MBO, we will discuss suggestions that the women made for how SEWA could assist them in accessing better housing.

Figure 8 - Monsoon Problems and Responses



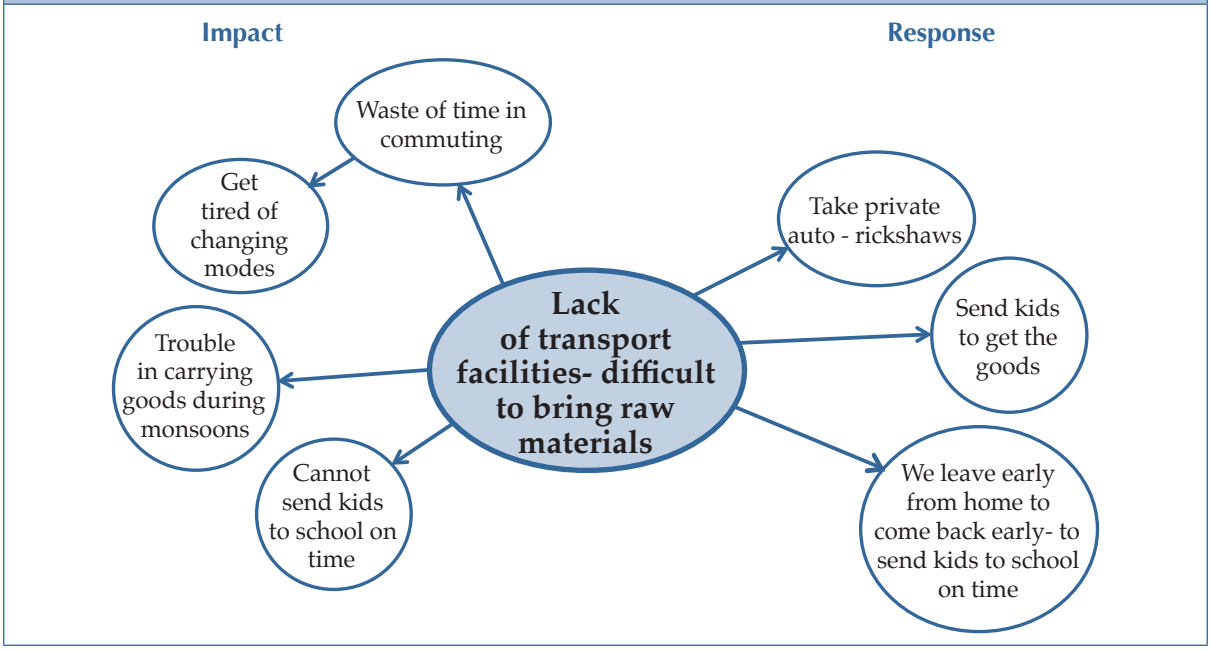
Source: FG 11

Figure 8 represents the response to poor quality roofing and consequent problems due to roofs leaking in the rainy season. The first response has been to put barricades at the door to stop water from entering the house and covering the roofs with plastic sheets to prevent leaking. The women also cover the raw materials with the plastic sheet to avoid damage. Another response has been to hang polythene bags from the roof to collect water so that it does not drip in the house. One woman said: "I hang polythene bags below the leaking roof" (FG11). Lastly, this figure shows that they stop work during the rainy season and then take up more work subsequently to compensate for the loss of work after the rainy season. During heavy rainfall, they have to stop their work completely. When there is a drop in income, they have to dig into their savings or they borrow from moneylenders, neighbours or friends.

The *agarbatti* makers have more trouble during monsoons as the *agarbattis* do not dry in the wet season and they have to stop their work completely.

The garment makers have other problems during the monsoons. Their needles break and raw materials get wet. The machine also requires frequent maintenance during monsoons. Their response is to buy new needles and get the machine repaired. When the materials get wet and spoiled, the contractors/traders pay them less. They have to then take loans to meet household expenses or cut down on expenditures. Women in one group (FG 9) said that they take work of making *rakhi* in the rainy season, which helps them to maintain a similar level of income. In this case too, the response is at either the individual or household level.

Figure 9 - Impacts of and Response to Lack of Transport



Source: FG 3

Figure 9 shows that the lack of– or inadequate – public transport means that the women find it difficult to go to the contractor to fetch the raw materials to work at home. If public transport, which is the cheapest mode, is available, they have to wait long to get it. This wastes a lot of their time. So, if they can afford to do so, they take an auto-rickshaw. But, that is expensive. Sometimes, they send their children to fetch goods and some of the children may cycle to go to fetch raw materials. Or else women start from home very early in the morning, so that they are able to return home on time to send their children to school. Otherwise, they are unable to oversee their children leaving for school. In FG3, women said that due to lack of transportation facilities, they have to walk to the contractor's place and carry the goods back home. One of the participants said: "By carrying the goods we get tired and have body aches, we sit on the road sides for some time and take rest."

2.3.2 Responses to Value Chain Dynamics

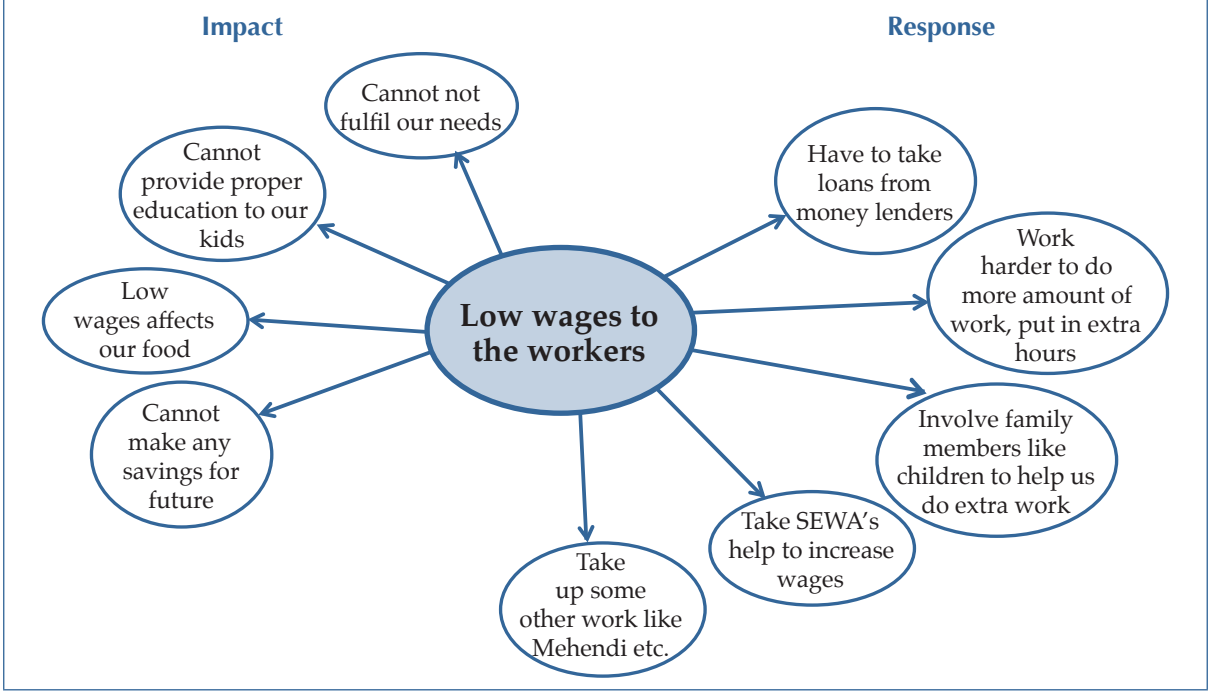
In response to the volume of work, over half of the *agarbatti* workers (58 per cent) and more than one quarter (28 per cent) of garment workers reported they were getting the same volume of work as in the previous year. But, about half of the garment workers reported that the availability of work had reduced in the last year. At the same time, 94 per cent and 73 per cent, respectively, of the *agarbatti* rollers and garment workers stated that the payments for their products had increased in the last year. Almost one fourth of the garment workers revealed that they are getting the same wages this time in comparison to last year. During focus group discussions, workers informed that in some areas contractors/traders have increased piece-rates every two years, while in other areas this happens every year.

Table 28 - Volumes and Prices Received for Main Good Compared with Last Year, by Product Type (%)

	Agarbatti rollers	Garment producers	Total
	Volume		
Higher	25.00	24.05	24.49
Lower	13.24	48.10	31.97
Same	58.82	27.85	42.18
Total	100.00	100.00	100.00
	Prices		
Higher	94.12	73.42	82.99
Lower	0.00	2.53	1.36
Same	5.88	24.05	15.65
Total	100.00	100.00	100.00
N	**68**	**79**	**147**

Source: Ahmedabad IEMS survey data, home-based workers (2012)

Figure 10 - Impacts of and Response to Low Piece-Rates



Source: FG 12

Figure 10 presents the responses to low piece-rates by the home-based workers from FG 12. The immediate response to low piece-rates, reported by both *agarbatti* rollers and garment makers, is to prolong the working hours (thus producing more) and to engage children to do this work in order to

produce more pieces. In case of money shortages, both groups reported that they also borrow from moneylenders to tide them over. These were either individual level or household level responses.

Low earnings led to a number of individual and household level decisions for coping. Most important was to reduce household expenses. The immediate impact then was to reduce spending by using public health facilities instead of private health facilities and to withdraw children from schools. One woman said, "My son left school after class 9th because we didn't have financial capacity to educate him further." A member of FG 13 stated that she had reduced expenditures on non-food items. For those shifted to relocation sites, the problems of being able to meet their expenditures was greater as the total work availability had also gone down and they were forced to cut back on many non-food expenditures (FG 5). Some undertake additional work such as mehendi work, work as domestic workers, packing of goods, embroidery, etc. to earn some extra money. In FG 10 the participants stated that they would take up other work during off-season, such as catering. Some also picked up some high-paying seasonal work, as in the case of *agarbatti* workers, though others did not take up their regular work from the contractor. One woman said: "I take other sewing work in festive season as it is to be done on time and is also high paying; in festive season I do not complete regular contractor's work on time" (FG 15).

To cope with the household requirements, both garment and *agarbatti* rollers do two kinds of things. First, they cut their personal expenses and borrow money; 67 per cent of *agarbatti* rollers and 82 per cent of garment workers revealed reducing personal expenses. Further, over 60 per cent of workers in both sectors borrow money to address the fallen revenue. Here, it is important to note that the majority of workers borrow money from private moneylenders, who charge a much higher interest rate than the nationalized banks. Once again, the responses are either at personal or household level to low piece rates.

Table 29 - Main Ways of Coping with Fallen Revenues by Product Type (%)

	Agarbatti rollers	Garment producers	Total
I used fewer workers	8.33	0.00	2.22
Lengthened work day	25.00	3.03	8.89
Borrowed money	66.67	63.64	64.44
Found other work	16.67	3.03	6.67
Another member of household found additional work	0.00	6.06	4.44
Another member of household started working	0.00	6.06	4.44
Cut down on personal expenses	66.67	81.82	77.78
No measures taken	8.33	0.00	2.22
Other	8.33	3.03	4.44
N	**12**	**33**	**45**

Source: Ahmedabad IEMS survey data, home-based workers (2012)

2.3.3 Intermediary Institutions

Some women in focus groups reported that they contact SEWA to negotiate piece rates on their behalf. As shown in table 27, this institutional response was stated in 3 focus groups. Another institutional response was to contact the labour department and ask them to intervene. Such an intervention became necessary as the workers themselves had organized to strike once. It was also revealed that the last wage increase was also the result of a strike by the workers, and advocacy by SEWA as well as intervention by the labour department.

All women said that they take the help of SEWA sometimes to talk to the traders and contractors to increase their wages. *Agarbatti* workers specifically reported taking SEWA's help once or twice to negotiate an increase in piece rates. A woman said in this regard, "It is due to SEWA that our wage is now 13 rupees per 1,000 *agarbattis*. I started making them when it was just 3 rupees per 1,000" (FG 15).

Almost every worker agreed that SEWA as an MBO is useful for their work. Much less commonly cited, though still noted by 40 per cent of workers, was the support from other workers in their sector. Workers help each other in getting work. The workers have differentiated between two roles of SEWA: one as an MBO helping in a number of issues and one as a trade union negotiating piece rates on behalf of the workers. SEWA's significance as a trade union was noted by 18 per cent of workers who considered it as helpful for their work.

Table 30 - Types of Organizations that are Identified as Being "Helpful", by Product Type and Main Buyer (%)

	Agarbatti rollers		Garment producers		Total
	Trader	Contractor	Trader	Contractor	
National government	9.09	8.57	2.50	0.00	4.8
Local government	0.00	0.00	2.50	5.13	2.0
NGOs	15.15	22.86	17.50	12.82	17.0
MBO/SEWA	100.00	82.86	85.00	79.49	86.4
Police	0.00	2.86	0.00	0.00	0.7
Other workers	27.27	37.14	40.00	51.28	39.5
Trade union/ SEWA	24.24	25.71	17.50	5.13	17.7
N	**33**	**35**	**40**	**39**	**147**

Source: Ahmedabad IEMS survey data, home-based workers (2012)
Note: The respondents have referred to SEWA when asked about NGOs and trade unions. Since this was a multiple choice question, we have not removed the options stated by the respondents.

Small numbers of workers identified very few institutions as helpful for their work. The main institutions, such as the welfare boards, which were supposed to take care of their welfare issues, were inactive. Another study (Mahadevia 2013) shows that the coverage of these boards was miniscule and it is therefore not surprising that the board does not get mentioned in the list of organizations helpful to the two groups of workers. Therefore the majority of workers replied neither helpful nor unhelpful when they talked about these institutions. Although there is a Welfare Board set up for unorganized workers, it was not seen as a useful institution by some of the workers, which is why 16 per cent of the workers considered national and local governments as unhelpful institutions. During FG 14, one woman stated, "See, only registered workers are getting medical benefit, what about other family members?" Another added, "Welfare Board should give scholarships to our children for higher education, otherwise how we can educate our children at higher level?"

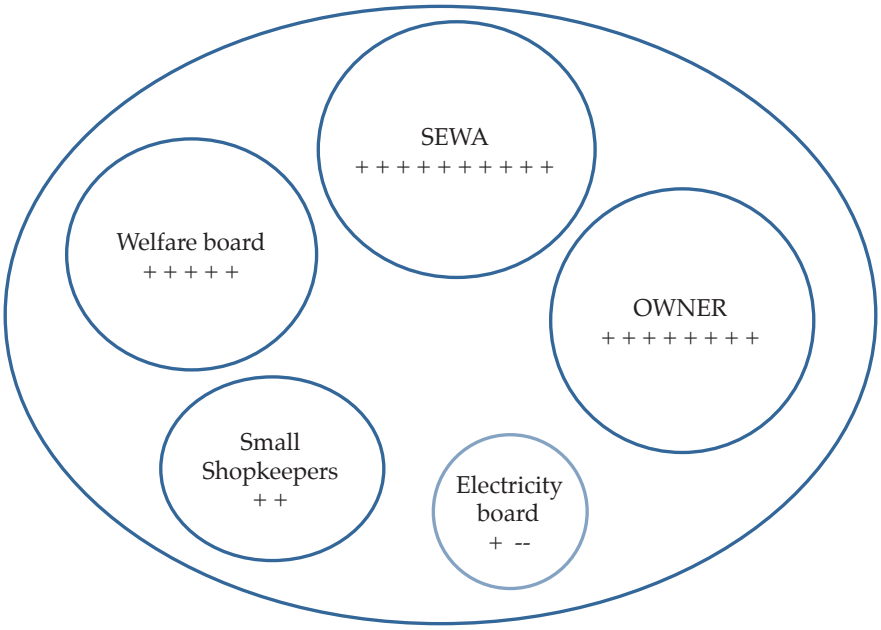
Table 31 - Types of Organizations that are Identified as Being "Unhelpful", by Product Type and Main Buyer (%)

	Agarbatti rollers		Garment producers		Total
	Trader	Contractor	Trader	Contractor	
National government	24.24	5.71	10.00	10.26	12.2
Local government	36.36	11.43	12.50	15.38	18.37
NGOs	3.03	2.86	5.00	0.00	2.7
MBO/SEWA	0.00	0.00	0.00	0.00	0.0
Police	6.06	0.00	10.00	0.00	4.1
Other workers	6.06	0.00	2.50	0.00	2.0
Trade union/ SEWA	3.03	0.00	0.00	2.56	1.4
Worker's co-op	3.03	0.00	0.00	2.56	1.4
Supermarkets or large retailers	3.03	0.00	2.50	2.56	2.1
N	**33**	**35**	**40**	**39**	**147**

Source: Ahmedabad IEMS survey data, home-based workers (2012)

During focus group discussions, the extent to which the intermediating factors affected their trade in the city was discussed. In this particular exercise, participants identified the institutions that have an impact on them; the size of the circles determined their importance. They also added more +/ - signs within the circles of institutions to show the positive and negative impacts. Figure 11 graphically indicates the relative importance of different intermediating institutions by the participants. It clearly shows that SEWA is at the top with the largest circle and most positive signs, followed by the trader/ contractor and then the welfare board.

Figure 11 - Institutional Map



Source: FG 10

Table 32 shows how on a number of times a particular institution was mentioned as having a positive and/or negative role, as well as the level of their importance in a comparative scale.

Table 32 - Importance of Institutions

Institutions	Frequency	Importance			Positive		
		Large	Medium	Small	+	-	+/-
Traders/ contractors	15	9	5	1	11		4
SEWA	15	9	5	1	15		
Welfare Board	14	3	7	4	14		
Electricity board	5		3	2		1	4
Urban local government	2	1		1		1	1
Shopkeepers supplying raw materials	2			2	2		
Public transport company (AMTS/ Janmarg)	2		1	1	1		1
Small shop keepers	1			1	1		
Vishwa– NGO	1			1	1		
ChhipaJamatTrust (CBO)	1			1	1		
Total	**58**	**22**	**21**	**15**	**46**	**2**	**10**

Source: Ahmedabad IEMS survey data, home-based workers (2012)

The workers across all the focus groups reported a total of 10 intermediating institutions (table 32). Of them, three – SEWA, traders/contractors and the welfare board – were identified as the most important. In fact, all the focus groups mentioned these as important for them, with exception of one group which did not identify the welfare board as important for them. Undoubtedly, all groups said that SEWA had a positive impact on them and 9 out of 15 identified SEWA's impact as large and another 5 identified SEWA's impact as medium. Of the 15 groups, 9 identified traders/ contractors as having large impact and another 5 as having medium impact. However, of the 15, only 11 said that these actors had a positive impact, while the remaining said that these actors had both positive as well as negative impacts. While all 14 groups stated that the welfare board mattered and had a positive impact, half of them said that this institution had medium impact and another 4 stated that it has small impact. Interestingly and surprisingly, only two groups identified the urban local government, that is the Ahmedabad Municipal Corporation (AMC) as having any intermediating role and only one said that it had a large role. However, of the two, one group identified the AMC's role as negative and the other group identified AMC's role as positive as well as negative. Another public institution, the Ahmedabad Municipal Transport Services (AMTS), was identified as an intermediating institution, one stating that it has medium impact and another stating that it has low impact. One group also identified this institution as having negative as well as positive impacts. The public institutions in Ahmedabad do not seem to be touching the lives of the home-based workers, except the labour welfare board.

Table 33 summarizes the support and hindrance of all institutions identified by all of the focus groups, including suggestions regarding how to increase support and reduce hindrances.

Table 33 - Assessment of the Institutions

Institutions	Help	Hindrance	Suggestions
SEWA	Helps with opening bank accounts		Should provide loans for new technology machines
	Gives identity		Should set up new workers' facilitation centres such as providing threads, etc.
	Negotiates wage/ rate increase		Should provide more training for skill upgradation
	Gives moral support		Should help getting more social security
	Helps to access benefits from welfare board		Should help getting work directly from traders
	Provides essential equipments/materials at cheaper rates		Should negotiate rate/ wages
	Makes arrangement for the education of their children		Should help to get subsidized machines
	Solves various problems		Should help to get public housing
	Gives training and guidance		Should help getting regular work
	Provides loans		Should ask traders to provide them pension
	Creates awareness		Should expand membership area by area
	Empowers workers		Should help getting scholarship for children

SEWA	Inspires to save		Should influence welfare boards to introduce more benefits, including new social security schemes
	Gives organizational membership		Should influence contractors for giving bonus
	Helped to set up minimum wages legislation		Should influence government for making additional welfare schemes for HBW
	Assisted in getting bonus		Provide security against evictions
	Fights for our rights		Should organize exposure trips
	Provides insurance		Should provide more useful training
	Increase self confidence		
	Provides skills training		
	Provides computer training		
Trader/ Contractor	Provides regular work	Denies work if late	Should understand workers' problems
	Lends money to workers and decides instalments in consensus with workers	Deducts money for inferior quality work	Should trust the workers
	Give more work in peak season	Demand quick return of loans	Should provide regular work
	Lends sewing machines when their own machines not working	Pays low wages	Should increase wages/ rates
	Repairs sewing machines	Do not increase wages	Should come home to deliver raw materials and collected products
	Gives bonus on festivals	Do not provide all materials all at once	Should provide all materials at one time
	Some give advance if required	Delay payments	Should give more volume of work on regular basis
	Replaces bad quality raw materials	Some deny advance or give less advance	Should extend advance
	Gives wages on time	Does not provide social security	Should provide medical aid
		Does not give health benefit	Should give bonus to all workers
			Should not deduct wages when workers cannot work due to illness

Table 33 - Assessment of the Institutions (continued)			
Institutions	**Help**	**Hindrance**	**Suggestions**
Trader/ Contractor			Should provide identity
			Should give more work
			Should provide financial assistance on account of work related health problems and injury
			Should provide good raw materials
Welfare Board	Provides ID card		Should provide scholarship to their children
	Provides tool kits		Should provide more tools
	Provides health insurance/ medical assistance		Should increase the amount of insurance
	Provides skill improvement training		Should help workers to get their own house
	Provides certificate of training		Should help to get new machines
			Provide social security schemes
			Should give sewing machines
			Should provide good toolkit
			Increase medical assistance given
			Provide pension
			Should provide maternity benefits to members
			Should provide benefits to family
			Should set up health centres for HBW
			Enact legislation for regularizing *Agarbatti* workers
			To provide toolkits once in every five years
			Introduce life insurance
			Provide training for other type of work
			Should provide loans to start businesses
			Help to expand the toolkit

Electricity Board	Increases efficiency and productivity	Cannot run machines without electricity	Reduce the electricity rates
		Sharp increase in cost in last few years	Improve maintenance
		Poor maintenance by the company	Do not harass
		Charging of commercial rates for work	
		Enforces penalties	
		Irregular supply	
		Use of manual machines due to high electricity costs	
Shopkeepers supplying raw materials	Allow goods' purchase on credit		Give discount on regular purchase
	Provide raw materials regularly		Should reduce the rates of threads and other raw materials
Public transport corporation (AMTS/ Janmarg)	Assists goods' transport	Inadequate public transport	Better public transport
		Lack of public transport	Should provide affordable transport
		High fares	
Local government (AMC)	Gives a *pucca* house	Demolish houses	Provide loan for new work
		Pushed them to city periphery	Provide health facilities at rehabilitation sites
		Increase in commuting distance	Provide education facilities on rehabilitation site
		Reduced work volume	Provide PDS at rehabilitation sites
		No contractors near rehabilitation sites	Should provide rehabilitation
		Post rehabilitation, increase in expenditures such as electricity, etc.	
Vishwa - NGO	Helped prevent house demolition		
Chhipa trust	Provided a one year garment stitching course with certificate		Restart the garment stitching courses again
	Provided financial assistance for education		Introduce 3 year advance course on garment stitching course

Source: Focus Group discussions

2.3.4 Role of the MBO: SEWA

SEWA, the MBO, came in as a major positive institution helping the respondents. Respondents of all the focus groups mentioned the large role played by SEWA with regards to various aspects of their work. They also had suggestions for SEWA to expand the sphere of their activities.

One large area of SEWA's contribution is organizing them and giving them an identity, self-respect, empowering information, and awareness. The organization has also inspired them to work for the betterment of people. It gives the home-based workers guidance and training related to their work and other things. A woman said: "No one knew my identity as a worker before SEWA organization was created. SEWA gave me and my work an identity of its own" (FG 15). SEWA has also increased self-confidence of the workers through its skill development programmes. Two women reported having received computer training from SEWA. One woman worker said, "Earlier we spent most of our time inside the house. But when we joined SEWA, we (came to) know how many people engaged in this trade and their work condition" (FG 4). SEWA also encourages workers to do work. One worker said, "We get inspiration from SEWA for our work that we are not weak and can do everything"(FG 1). The workers also said that SEWA gives them advice whenever required.

SEWA's training and education about various aspects had empowered them. For example, education on minimum wages and the workers' role in the economy was felt as very empowering. One woman stated: "Earlier I was afraid to go outside my home but now I have confidence and can talk to my employer to hike my wages"(FG 14).

The next big contribution by SEWA was negotiating the piece rates with the contractors/ traders from time to time. SEWA also engages city and state level officials in the process of negotiation so that there is pressure on contractor/ traders to implement the negotiated rates. To do this, SEWA conducts meetings with the traders in which the workers participate. SEWA has also played an important role in bringing in the law of minimum wages. For some workers, SEWA has been instrumental in getting them a bonus every year or during festival times.

SEWA's negotiations with the contractors/traders has given the women great confidence. In fact, women said that now they feel confident to negotiate the rates with the traders themselves. One stated, "Earlier SEWA members had talked to traders to increase our wage but now we talk to traders for the same ourselves" (FG 1). Another worker said: "One year before we talked to the Johraben of SEWA about our low wages, after that she intervened and our wages hiked from 9- to 13 rupees for one thousand *agarbatti*" (FG 14). SEWA also fights with the traders for the workers' fair wages. In fact, SEWA helps the workers to solve various issues related to their work.

For the garment workers, SEWA has been a facilitator in purchasing some raw materials such as needles, threads, machine oil, etc. at low prices through the facilitation centre at Shahpur. This was important to increase their incomes.

The third role played by SEWA was to link the workers to SEWA Bank and assist them in opening bank accounts. That further has induced a savings habit among them. Other financial services are also available from SEWA such as insurance. Loans are also made available by SEWA. One of the members said, "I had taken a loan of 5,000 rupees for my husband to start a business of shoes" (FG 3).

Another important role of SEWA was to carry out advocacy in setting up the Labour Welfare Board and then assisting the workers to register with this board.

The respondents had various suggestions for SEWA. They said that SEWA should continue to negotiate wages/rates for them with the contractors/traders, get them regular work and a pension on retirement. Those getting work through the contractors (middlemen) expect that SEWA helps them in doing away with these middlemen and trains them to directly deal with the traders. They also expect that SEWA would provide them loans to purchase machines with new technology. This is in the case of garment workers. They also expect that SEWA provides them training to stitch new products. One woman said: "Right now, we are stitching only dupatta. We should get training on how to stitch other cloths also" (FG 1). The workers wish to access more training through the establishment of new training centres.

In fact, the technology has been changing fast and the women would like SEWA to assist them with training and loans to transit to new technology, such as new sewing machines, etc. Some of them realize that the new technology is expensive and have suggested that SEWA assist them to get subsidies from the government for buying new machines.

Housing has been a very important concern for these women. They want SEWA to protect them against evictions, which are rampant in the city. Evictions have disrupted their lives. They also want SEWA to influence the government to get them a cheap house or low interest loan to purchase a house. Those shifted to relocation sites expect that SEWA will assist them to get more work on their new residential sites.

Lastly, the participants suggested that SEWA should force the welfare board to develop social security schemes for *agarbatti* makers. It should either provide scholarships for their children or help them to get scholarships from government. The workers also have suggestions for SEWA to influence government to introduce new welfare schemes for home-based workers.

2.3.5 Role of Trader/Contractor

Traders/contractors provide work to both garment workers and *agarbatti* rollers. The members generally have good terms with the contractor and reported that sometimes a trader/contractor will lend them money – up to 1,000-2,000 rupees – when they are in need. One of the members said that, "He also lends his sewing machine when ours is not working and he also takes our machine for repairing during that period" (FG 3).

But if any garment worker reaches late to the traders' shop, they don't provide work for that day. In the case that the finished work is not as per standard, money will be deducted from the wage. Traders don't consider workers' personal problems, as one woman said, "He [the trader] doesn't consider my problems, like if I could not deliver work at time due to illness of my child. He says it is my personal matter and he wants his work on time"(FG 1). Contractors also don't provide all essential raw materials at once, therefore work is delayed and workers waste their time in waiting for the supplementary materials. Participants also complained that contractors don't give them their wage for the full work they have done. Contractors keep some wages so that the worker will be bound to do work with the same contractor in the future (FG 4).

The workers suggested that the contractor should pay them higher piece rates for the hard work that they put in. Also, they want the contractor to supply the raw materials to their homes, instead of the workers having to travel to his place; this would save them from the huge transport costs spent in commuting by auto-rickshaws. As one woman suggested, "The wages of workers should increase and employers should not cut the full wages for a damaged portion of the whole work" (FG 14). The suggestions given for traders/contractors were that they should give advance money whenever required and should increase the wages, especially for the *agarbatti* workers. Other suggestions included giving regular work and providing a yearly bonus.

2.3.6 Role of Gujarat Labour Welfare Board

Gujarat Labour Welfare Board was set up with the purpose of providing social security and ensuring minimum wages to the workers. There are 50,000 registered members with this board; SEWA helped 19,000 workers to get registered. This board provides training for three days for skill upgradation and certification for the same to registered workers, health insurance of 1,200 rupees per year, as well as identity cards and tool kits for work. The workers revealed that the welfare board should increase the amount of health insurance and include their family members in the coverage. They also wanted the welfare board to provide scholarships to their children, help workers to get a new house or upgrade its existing condition, provide subsidized loans to start new businesses or buy the latest technology (e.g. sewing machine) and introduce social security schemes like pension and life insurance.

In an interview with Mr. M. V. Jadeja, Deputy Labour Commissioner, we were told that the Gujarat Labour Welfare Board set up the Gujarat Unorganized Labour Welfare Board in February 2007. He stated that three days skill upgradation is not a good idea because any worker could not change their earlier work and the board could not give them major training like stitching, plumbing, electric line fitting, etc. It might be gainful if the board gives them a month long technical training so that they could find high earning work after getting training. However, workers wouldn't be able to spend so much time because it affects their earnings in that month.

In response to the provision of minimum wages, he stated that it was impractical to fix minimum wages for workers who do not have a particular employer, such as rag pickers and *agarbatti* rollers. He further added that the majority of home-based workers are working on a part time basis and it is one of the major constraints to prescribing them a minimum wage.

Part 3: Linkages and Contributions

In this part of the report, forward and backward linkages of each trade (*agarbatti* rollers and garment workers) are discussed.

3.1 Linkages to City Economy

For this study, SEWA selected a sample in which half of the workers were getting work through traders and half through contractors in both types of work. It is likely that this does not represent the situation in Ahmedabad City.

Table 34 - Access to Work (%)

%	Garment producers	*Agarbatti* rollers	Total
Through trader	50.60	48.50	49.70
Through contractor	49.40	51.50	50.30
N	**79**	**68**	**147**

Source: Ahmedabad IEMS survey data, home-based workers (2012)

In table 35 formal business indicates traders whereas other includes contractors. Here, most of the times, a contractor gives the finished product to the trader and the product is then sold by the trader. A small number of workers sell their goods directly to the general public (5 per cent) or private individuals (under 4 per cent), while about 6 per cent sell their products to informal sellers.

Table 35 - Main Buyers Of Products Made by Home-Based Workers, by Product Type (%)

	Agarbatti rollers	Garment producers	Total
Formal businesses	50.77	39.73	44.93
Informal businesses	4.62	6.85	5.80
Other informal workers	0.00	1.37	0.72
General public	1.54	8.22	5.07
Private individuals	0.00	6.85	3.62
Other	38.46	54.67	47.14
N	**65**	**73**	**138**

Source: Ahmedabad IEMS survey data, home-based workers (2012)

A large number of workers reported that their products are sold in local markets (43 per cent) whereas almost 50 per cent were sold within the country. A small number (2 per cent) of *agarbatti* workers noted that their products also go to international markets like China, Japan, Sri Lanka, etc.

Table 36 - Main Buyers of Products Made by Home-Based Workers, by Product Type (%)

	Agarbatti rollers	Garment producers	Total
Local customers	6.25	1.54	3.54
Local markets	31.25	52.31	43.36
Local buyers	4.17	1.54	2.65
Buyers from within the country	56.25	44.62	49.56
International buyers	2.08	0.00	0.88
N	**48**	**65**	**113**

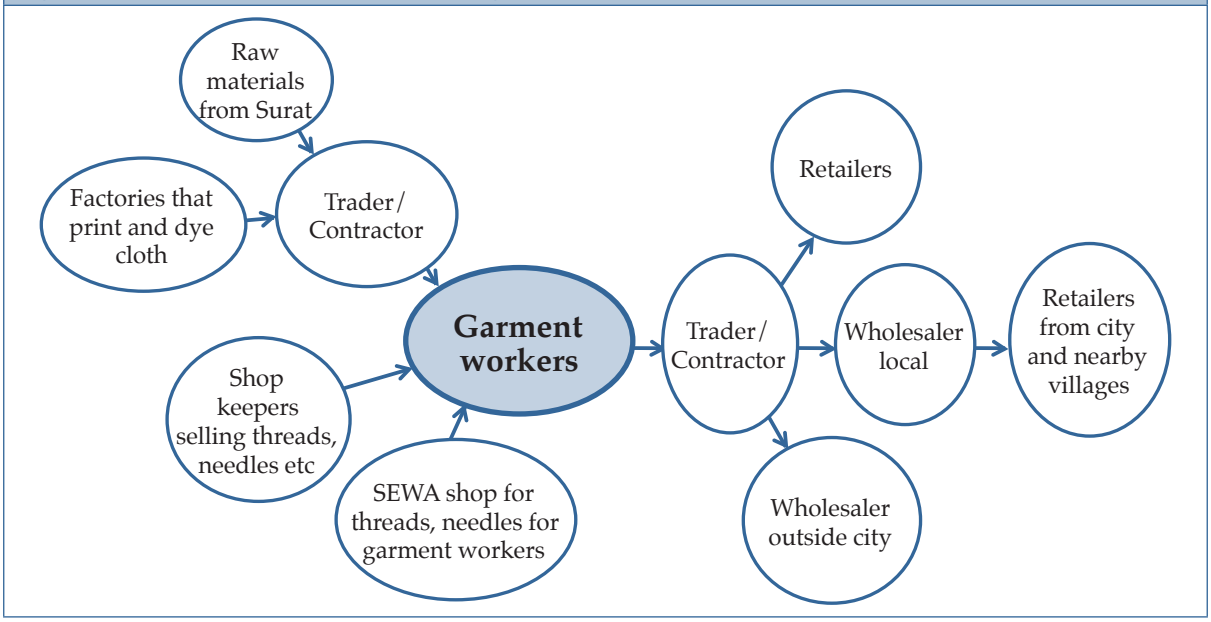
Source: Ahmedabad IEMS survey data, home-based workers (2012)

3.1.1 Economic Linkages – Garment Workers

The women home-based workers must collect the material that has to be cut to size and/or stitched. One of the five women gets the material delivered at home by the contractor, while the other four usually walk to the contractor's place (usually a home). The contractors are generally from the areas where the women are living or are in the nearby areas. The women have to buy other raw materials like threads, oil, needles, etc. from the nearby shops in their areas. After the goods are stitched they have to return them to the contractor and he sends the garment for ironing, labelling, buttons, etc. The contractor finally supplies the goods to wholesalers in Dhalgarwad market and other markets in the city (FG3).

In another group (FG2), the garment makers, who live in the central city, go to get raw materials from a contractor, also in the central city, but, at a distance of about 3 kilometres. Then, they got to SEWA's facilitation centre at Shahpur, where the needles, thread, etc. are available, to purchase these additional raw materials. They generally go to various shops in the old city to purchase various other necessary raw materials. After the garment is stitched, it is taken for embellishments such as embroidery, buttons, company labels, etc. and then sent for ironing to different agents in the nearby areas. Once the garment is ready, it is purchased by the local wholesalers, big shopkeepers and retailers within the city and nearby villages. It is exported to cities like Mumbai, Delhi, Indore and Kolkata. It is also sent to other states like Rajasthan, Madhya Pradesh and West Bengal.

Figure 12 - Forward and Backward Linkages, Garment Workers



Source: All Focus Group discussions related to garment workers

3.1.2 Economic Linkages – Agarbatti Workers

Some women go to the factory to get work, bring the materials home to make the *agarbatti* sticks, and in the evening they return the sticks to the factory owner. These factory owners are big wholesalers and have two or three such factories in the area. The factory owners prepare the raw material required for making the *agarbatti* sticks and give it to the workers. Once the sticks are made they are sent for drying, scenting and packaging. One of the members said, "My factory owner is a big wholesaler who has two or three factories. He purchases the raw materials like jaggery, coal powder, gum etc. from a big dealer for such raw materials. He keeps the mixture ready for us to make the *agarbattis*. The packaging, scenting etc. is done at other factories of the owners" (FG 6). The finished goods are sold off within the city to small businessmen in Ahmedabad City and some wholesalers supply goods to other cities like Bangalore, Bombay, Baroda and Surat.

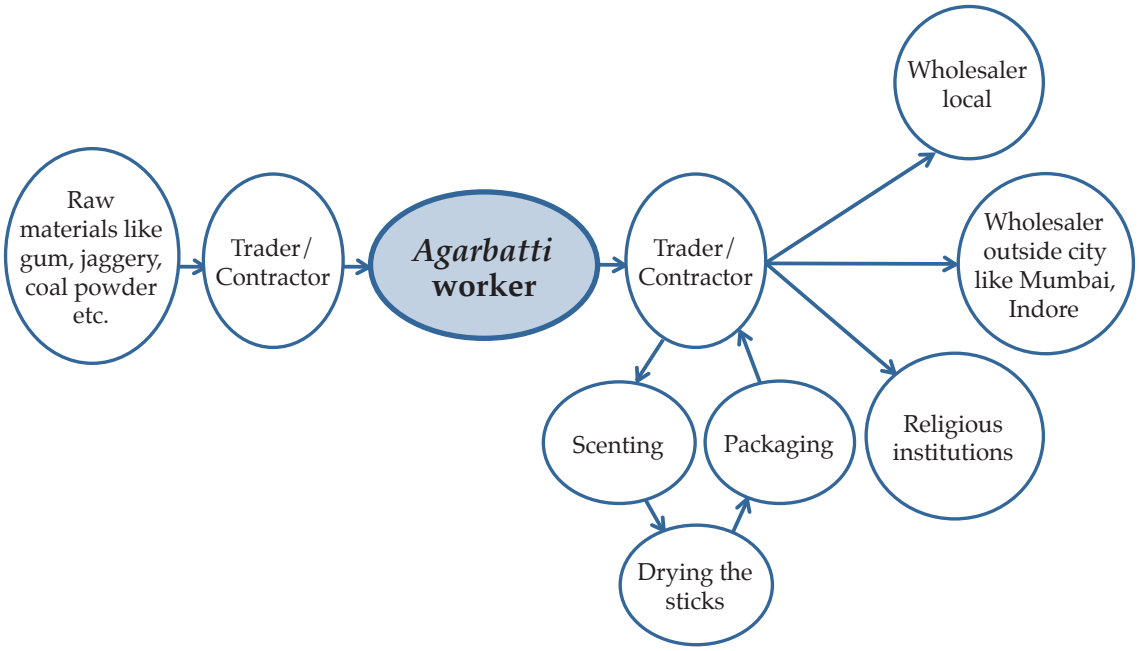
Devjibhai M. Patel, one of the members of GAMDA, said in an interview that there are almost 200 factories related to *agarbattis* running in Ahmedabad. Of 200, half of the industries are directly manufacturing *agarbatti* either manually or using machines and the rest of the industries are doing value addition work such as scenting, packaging and labelling after buying rolled *agarbatti* from the *agarbatti* makers.

He shared that during 1965 to 1975, there was only one *agarbatti* manufacturer known as Aarti Group. During 1975 to 1980 this number increased from 10 to 15 and after 1980 the number increased tremendously because of the closure of the cotton mills. Right now, about 1 lakh workers' livelihoods depend on this trade in Ahmedabad.

He noted that the main export centres are Maharashtra (Goa, Pune, Ratnagiri District, Nasik and Sirdi), Madhya Pradesh and Rajasthan and West Bengal. Ahmedabad also exports *agarbatti* to African and Arabian countries. *Agarbatti* manufacturers pay tax on the purchase of raw material.

During a field visit to Bapu Nagar (an area where the majority of the workforce is employed in making *agarbatti*), one of the factory owners explained that they import wood sticks from Vietnam due to its high quality. They buy other raw materials from West Bengal that comes there from Bangladesh and Vietnam. Now some people have started making *agarbatti* by using automatic machines that also come from China and Vietnam. The market of branded *agarbatti* extends outside India, mainly in countries with a large Buddhist populations like Sri Lanka, Japan, China, etc., because Buddhists use *agarbattis* for religious purposes.

Figure 13 - Forward and Backward Linkages, *Agarbatti* Rollers



Source: All Focus Group discussions related to *agarbatti* workers

3.2 Contribution to the Economy

At the end of the focus group discussions, participants were asked how they contribute to the city in terms of local economy and to the environment. Home-based workers in garment making believe they are an important part of the chain in providing cheap and readymade garments to the general public as well as poor. The livelihood of other workers associated with this activity, such as those who wash, iron and fold, and pack garments are also dependent on this work. Other poor workers like rickshaw pullers, loaders, and sewing machine repairers get work as a result of the home-based work. The shops who sell thread, machine oil and sewing machines depend on this trade. So, this sector provides employment opportunities to both formal and informal sectors. It was claimed by home-based workers that on one side, they were not getting fair wages but on the other side, contractors

and traders were making profits due to their work. A woman said during a focus group discussion that,"It is because of us that shopping malls get a continuous supply of readymade garments, and we are an important part of the chain."Another woman said, "It is my labour in the finishing of garments which fetches more prices for the garment seller" (FG 15).

During focus group discussions, both the groups of home-based workers felt that they contribute to the city and regional economy by paying taxes directly or indirectly. A woman said, "Through my work, government gets benefitted by the taxes, traders get benefitted and customers who don't have time to stitch their own cloths also get benefitted."Another home-based worker revealed in the same group, "It is because of my work that people get a supply of *agarbatti* in the market."

Figure 14 - Contribution to the City Economy

The wholesalers benefits by paying low wages

Other workers like ones who press clothes

Small business men who sell the products made by us.

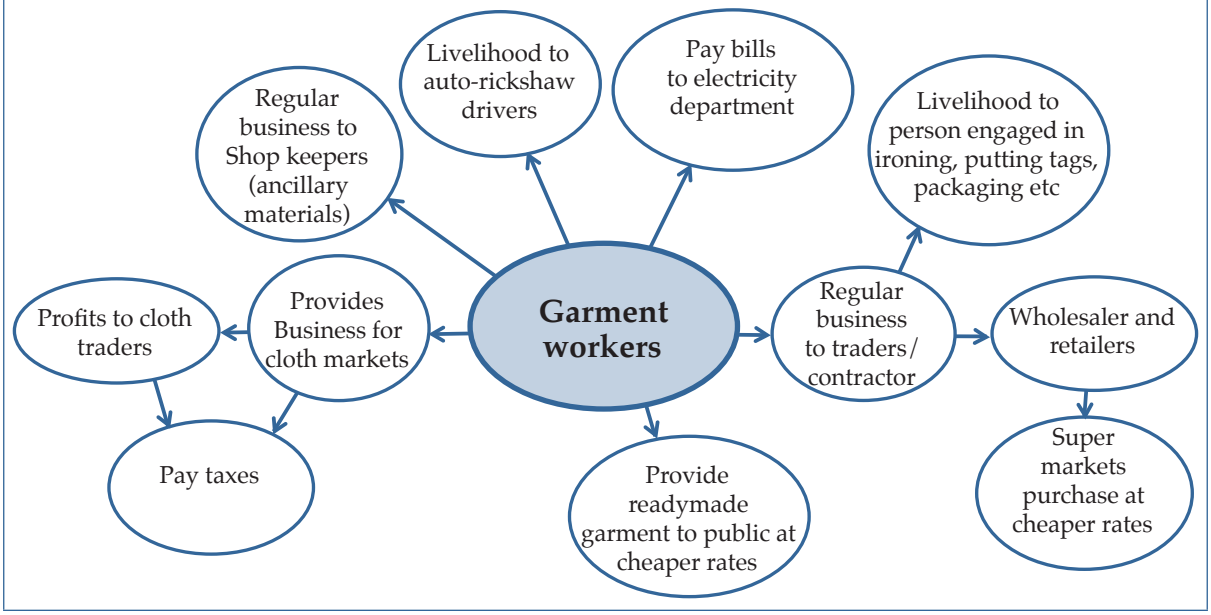
Workers who put label/tags on the clothes stitched by us.

Workers who do the packaging of clothes stitched by us.

Contractor also gets work

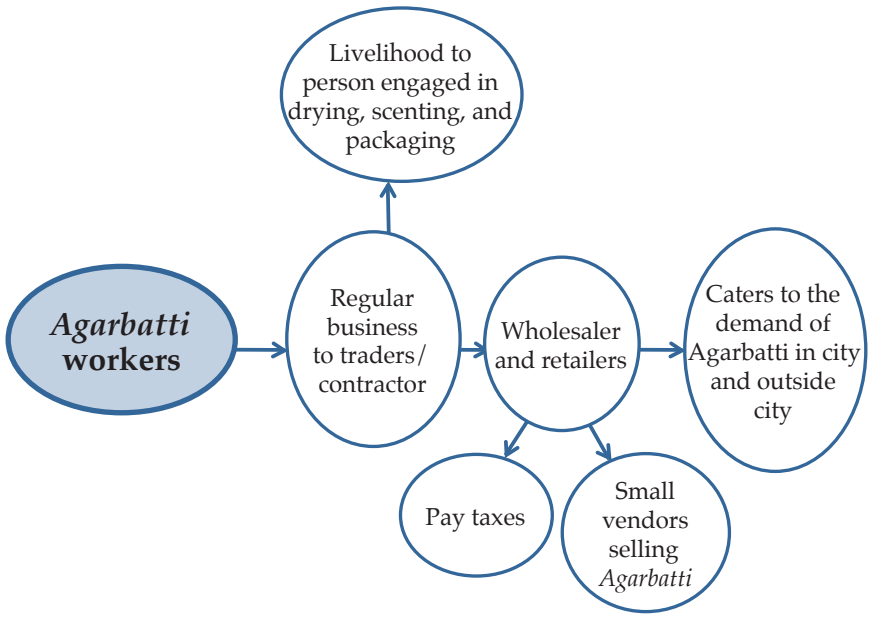
Source: FG 3

Figure 15 - Contribution to the Economy - Garment Workers



Source: Compiled from all Focus Group discussions for garment workers

Figure 16 - Contribution to the Economy - *Agarbatti* Workerss



Source: Compiled from all Focus Group discussions related to *agarbatti* makers

Part 4: Key Findings and Policy Implications

The objective of the IEMS was to provide credible, grounded evidence of the range of driving forces, both positive and negative, that affect conditions of work in the informal economy over time. It also set out to test a set of hypotheses about the informal economy, including whether or not the informal economy is linked to the formal economy and contributes to the city economy. The study places informal workers and their organizations at the centre of the analysis, examining not only the impact of these forces but also informal workers' strategic responses to them.

Like other Indian cities, Ahmedabad has a very large informal sector providing livelihoods to a large section of population. Mahadevia (2012) estimates that in Ahmedabad City in 2009-10, 80 per cent of female workers and 67 per cent of male workers were informally employed; further, that 91 per cent of women and nearly half of men working in manufacturing were self-employed, of which most were home-based. Thus, the sector of home-based workers taken for this study is very important for Ahmedabad City and its economy and, especially, important for women workers in the city.

Key Findings

The home-based workers covered in the study belong to households where most other members are employed in the informal sector; nearly 78 per cent of the sample had at least one member engaged in informal work, whereas only 28 per cent of the sample had at least one member of the household engaged in the formal sector. Low incomes means that nearly all adult members of the household have to work to get income and hence the households surveyed in this study have high work participation rates of 60 per cent and hence low dependency rates. Less than 12 per cent of the sample home-based workers reported that their work is the main source of income in their house, while 65 per cent and 20 per cent of workers revealed that earnings from informal work and formal work, respectively, of other household members are the main source of household income.

Home-based work is often preferred by women for cultural reasons as well as practical exigencies such as the need to take care of the house and children: it allows women, especially from low-income households, to augment family income while taking care of families.

Specific trades among home-based workers are often dominated by specific caste or religious communities. In the study sample, 57 per cent of the *agarbatti* rollers belonged to Scheduled Castes and 95 per cent of the garment workers were Muslims. A quarter of them had no education, another 30 per cent had some primary education and another quarter had completed primary education. *Agarbatti* rollers typically had little or no education while the garment workers typically had more education.

A very small percentage of the surveyed workers and their households receive any social assistance from the government. The majority of the workers (83 per cent) reported that they have to suspend their work when they fall ill or face personal crises or obligations, thus earning no incomes during those periods. During such eventualities, even family members are not likely to step in to carry on their work. Thus, when they return to work, they have to put in extra efforts to recover lost income in absence of any social security coverage.

With respect to negative driving forces, small and poor quality houses and low piece rates were identified as the main negative forces by the majority of workers. About 50 per cent of the sample lived in one-room houses and another 37 per cent in two-room houses. Further, 57 per cent of the houses were built of semi-permanent (semi-*pucca*) materials. Since their homes double as their workplace, the small size and poor quality of their homes undermine their productivity, particularly during the rainy season when some have to stop working and forfeit earnings. Two-thirds of the workers stated their wages or earnings were too low to help make ends meet. This led 78 per cent to reduce their household expenses and 64 per cent to borrow money from private moneylenders at high interest rates. Some had savings accounts at or took loans from the SEWA Bank but none of the sample borrowed from other formal banks.

Both groups of home-based workers reported occupational health problems: more so *agarbatti* rollers (73 per cent) than garment workers (57 per cent). Due to long working hours, both groups experienced body pain – in their back, waist, or legs. The garment workers experienced eye strain while the *agarbatti* rollers experienced eye irritation (from the dust and powder used in making the incense sticks). The *agarbatti* rollers also reported breathing problems from inhaling the powder and dust.

All of the home-based workers in the sample were sub-contracted workers who received their work orders and raw materials from – and returned their finished goods to – either a trader/firm or through an intermediary/contractor. The majority of the *agarbatti* rollers got their work within their neighbourhood or nearby while some of the garment workers had to go to market areas to get work from a trader. The monthly turnover of the *agarbatti* rollers varied between 1,400 to 1,600 rupees while the turnover of the garment workers varied between 2,100 to 2,500 rupees. The workers who deal directly with a trader earn more than those who deal with contractors who need to take their "cut". Both *agarbatti* and garment workers revealed that even if they could not deliver quality work due to poor quality of raw materials, the contractor or trader deducts a certain amount from their wages.

Home-based sub-contracted work provides earning opportunities to large numbers of low-income women and men and also offers profit-making opportunities to large, often brand-name, firms. Brand-name incense stick manufacturers like Malahar, OM Sairam, and Surya as well as brand-name garment producers like Asopalav and Pooja Garments, depend on these home-based workers. These firms sell home-produced merchandise in local, regional as well as international markets. Indeed, there is a strong link between home-based sub-contracted production, the formal economy, and the global economy.

In terms of their contribution to the city economy; home-based workers provide inexpensive but skilled labour. Many garment workers have been engaged in this work for generations and make traditional clothes that are worn on special occasions, like weddings. Many of the garments made are sold at high prices in the local market; some are sold in the international markets. Other garments – cheap and durable clothes – are sold in local and regional markets that serve the general public, especially the poor. Hence, the home-based work is not a separate residual part of the economy but totally entrenched within the overall economy. Further, home-based work has backward linkages to the suppliers of equipment, raw materials, and other goods. The many forward linkages include providing work to those who wash, iron, fold, and package the garments, as well as to rickshaw pullers and head loaders who transport the garments.

At the same time, home-based work allows firms to hire workers outside of workshops and factories and, thus, outside the regulatory control of the labour department. In so doing, the firms reduce their own costs and risk by passing on the costs and risks to the workers themselves. Thus, home-based sub-contracted work is highly exploitative as the workers have to bear many of the non-wage costs of production (equipment, workplace, utilities); earn low incomes; and do not have labour or social protection. When home-based work is polluting, as in the case of *agarbatti* rolling, there are also negative impacts on the health of the worker and her family.

In this rather hostile work environment, most of the workers (86 per cent) reported that SEWA was supportive of their work, helping them to negotiate higher piece rates as well as getting regular work. The Welfare Board and other workers engaged in the same trade were also considered helpful by many of the workers in the sample but they also revealed that even if they were registered with the Welfare Board, they did not necessarily get the benefits due to them such as pensions, scholarships for their children, family health insurance, and training.

Policy Recommendations

Given that the home-based workers work in their own homes and yet are dependent on traders or their intermediaries, the contractors, for their work, adequate policy responses must be of various kinds and occur at multiple levels. More specifically, the policy response has to be at the local level with regards to (i) housing, which includes availability, quality, size and location, and (ii) affordable transport. Both of these areas are in the realm of urban planning. An additional urban policy response could be to develop work sheds within slum settlements for the home-based workers to use as and when necessary; funding for the work sheds could be provided by the national housing programme. Policy response must also take place in regards to employment relationships – work orders, piece rates, payments, worker benefits –as well as social protection. These two areas are in the realm of labour and social policy.

Key Policy Messages

1. Recognize home-based sub-contracted workers as dependent workers in an employment relationship.
2. Recognize that the homes of home-based workers are their workplaces and grant them de facto tenure and basic infrastructure services.
3. Provide housing finance and other housing services to allow home-based workers to upgrade their homes-cum-workplaces and make them more productive.
4. Negotiate more secure work orders and higher piece rates for home-based sub-contracted workers and protect them against arbitrary cancellation of work orders or rejection of finished goods.
5. Negotiate worker benefits and social protection, including health insurance and pensions, for all home-based workers, both self-employed and sub-contracted.

Key Legislative Reforms

The Government of India has signed, but not ratified, ILO Convention 177 on Homework (1996). A National Policy on Homeworkers was drafted by the Ministry of Labour in 1999/2000. However, since then, nothing has been done to promote the draft policy. The Government of India should ratify ILO Convention 177 on Homework and promote the draft policy or new legislation to reflect the provisions of ILO Convention 177.

Sub-contracted home-based workers should be given due recognition as dependent workers under labour laws. Legislation should aim not only at higher piece-rates, better working conditions, and social protection but also skills training and market access.

Key Housing & Urban Planning Reforms

The local government is responsible to ensure that the urban poor have access to affordable housing and land on which they can construct incremental housing. The national government has a new housing programme named Rajiv Awaas Yojana (RAY), which relies on the people themselves to build their own houses on land that the local government makes available to them through granting tenure to existing land or providing land appropriated through planning mechanisms. Thus local government has the primary responsibility for ensuring that the land at convenient locations is available to the urban poor households to construct their own houses. The national government, under RAY, has proposed mandatory reforms within the local government, one of which is to ensure 20-25 per cent of the land or built-up area is reserved for the urban poor to fulfil their need for convenient residential locations. The other mandatory reform proposed is to ensure 25 per cent of the local government budget is reserved for the urban poor. Both these reforms are to ensure access to conveniently located lands and finance for the housing of the urban poor. In the study sample, home-based workers from households which had been relocated to the city's periphery reported that being at a greater distance from their contractors or traders meant more time and money spent in commuting, leading often to fewer work orders.

As well, the provision of worksheds in the slum settlements should be included as a part of the national housing programme. If urban poor households are allowed to construct their own houses, they can set up worksheds on their premises or neighbourhoods so that polluting work, such as rolling *agarbattis*, can be done in areas outside the homes, thus limiting exposure to harmful chemicals and dust for both the worker and other family members.

Key Institutional Reforms

1. **Identity Cards** – Home based workers are isolated and scattered. They lack identity as workers. Therefore, all home-based workers should be given identity cards.
2. **Organization & Representation** – Membership-based organizations of home-based workers, both associations and trade unions, should be encouraged and promoted. Also, these organizations should be recognized and invited to participate in relevant policymaking and rule-setting processes.
3. **Social Protection** – The state government, through its Labour Welfare Department and Social Security Board, is responsible for implementing the national Unorganised Sector Social Security

Act, 2008. Gujarat State set up the Gujarat Unorganised Sector Workers Social Security Board in 2012, which is not yet fully functioning. The board is expected to provide health benefits, retirement pensions and maternity benefits. The workers are responsible for registering with the Board to avail of the mandated social assistance and social security benefits (Mahadevia 2013). The Social Security Board should devise a mechanism to register all informal workers, including home-based workers. It should seek the help of membership-based organizations of informal workers, such as SEWA, to register workers with the Board. Further, there should be improved implementation of the existing health insurance programme named the Rasthtriya Swasthya Bima Yojana (RSBY). All home-based workers should be registered in this programme. Further, the procedures to avail of benefits under the various welfare schemes of government should be simplified and written in local colloquial languages.

4. **Minimum Wages/Piece Rates** – The state government's Labour Welfare Department is also responsible for setting and then monitoring minimum wage rates. Home-based trades should be included in the Minimum Wages Act, and the minimum wage rates should be adjusted to the piece rate system by which most sub-contracted home-based workers are paid. Currently, the State Minimum Wages Advisory Committee/Board consists of representatives of the employers/contractors and of the trade unions of formal workers. To decide the minimum wages for occupations/trades in the informal economy, the Committee should include representatives of the unions/associations and employers/contractors of informal workers.
5. **Skills Training** – The industry-specific Welfare Boards are responsible for providing skill training, an activity that should be expanded. The skill training programmes should include continuing education, so that the informal workers, and among them women in particular, are better able to bargain for favourable piece rates with the traders and/or contractors.
6. **Statistics** – A committee of statisticians should be constituted at the central level for collecting data on the home-based trades and the workers in these trades. Recent efforts to improve statistics on informal workers and informal firms, including home-based workers and firms, should be promoted and continued.

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The Informal Economy Monitoring Study (IEMS) is a part of the Inclusive Cities project. Inclusive Cities is a collaboration of membership-based organizations (MBOs) of the working poor, international alliances of MBOs and support organizations working together as partners to improve the situation of the working poor. Launched in late 2008, Inclusive Cities aims to strengthen MBOs in the areas of organizing, policy analysis and advocacy in order to ensure that urban informal workers have the tools necessary to make themselves heard within urban planning processes.

The Informal Economy Monitoring Study is being led by Women in Informal Employment: Globalizing and Organizing – WIEGO (see www.wiego.org) – a global action-research-policy network that seeks to improve the status of the working poor in the informal economy, especially women. WIEGO has convened a Technical Advisory Committee (TAC) to guide the project.

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Caroline Moser, Angélica Acosta and Irene Vance led the development of, and training for, the qualitative modules of the study.


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