

Evaluating the Impact of SY2SP: ENDLINE REPORT

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Executive Summary

This report presents the results of a final evaluation of the impact of the *Sahbhagi Yojana 2 Support Programme (SY2SP)*, a slum improvement initiative in Ahmedabad, India. The project implementation is through a partnership between the Ahmedabad Municipal Corporation, the Gujarat Mahila Housing SEWA Trust (MHT), and slum residents themselves. For the purposes of the programme, MHT is funded by USAID with CHF International as the support agency.

Background

As the pace of urbanization increases in countries such as India, the urban poor are increasingly forced to reside in unsanitary and hazardous conditions, lacking access to even basic facilities and services. Ahmedabad, the financial and industrial capital of Gujarat, is no exception and a large proportion of its population live within its 1,000 slums, many of which have limited access to water and lack basic sanitation. This can be detrimental to the health and quality of life of residents.

Within this context integrated slum improvements programmes, whereby physical infrastructure is provided alongside other services, have been shown to have a positive impact not only on residents' quality of life, but on a range of other indicators, including health, productivity and income. These benefits can accrue not only to the individuals concerned but to the wider economy and society as well. The *SY2SP* is an example of such an approach to slum improvement, and the present study is the first step in evaluating its impact.

The programme is based on a partnership approach and is being implemented on a cost-sharing basis between the Ahmedabad Municipal Corporation and slum residents. The Gujarat Mahila Housing SEWA Trust (MHT), a sister organisation of the Self Employed Women's Association (SEWA) is a key partner in the project, responsible for mobilising the community and coordinating between all programme partners, and is funded and supported for the purposes of the programme by USAID through CHF International. Other partners providing services in these communities as part of the project are Lok Swathya Mandali (LSM), SEWA Bank, and the Foundation for Public Interest (FPI), who have been working in the study areas since 2001.

The Study

A baseline survey was administered to 285 women residents in five slums in Ahmedabad in Autumn 2005, with an endline survey of available respondents carried out over a two week period in November 2008. The respondents were asked a range of questions about themselves and their households, relating to demographics, community facilities and services, education, employment and income, health, and civic engagement.

Key Findings

At the time of the baseline, respondents reported a range of problems stemming from the lack of basic amenities. These included the accumulation of mud, sewage and waste water in their area and the flooding of their homes with effluent due to the lack of adequate gutters, drainage and paved roads. They reported that this in turn was leading to a range of health problems and disease epidemics. Many women were forced to use open areas due to the lack of individual toilets, causing shame and inconvenience, or to spend long hours queuing for unhygienic public toilets. Women without water connections spent on average two hours per day collecting water, and quarrels in some areas resulted from the lack of facilities to dispose of waste water. In addition, women were afraid to go outside at night due to the absence of streetlights. However, in 2008:

- 96% of respondents have an individual water connection, saving their time, increasing the cleanliness of the area and reducing neighbourhood conflicts over water.
- 95% of respondents have a properly functioning individual toilet, ending the indignities of open defecation and the problems (particularly for women) associated with public toilets for the majority of respondents.
- 94% of respondents have a functioning individual gutter connection, reducing problems of overflowing gutters and the accumulation of mud and wastewater, which respondents viewed as causes of disease in their area.
- All areas have fully paved roads, which respondents report has also helped reduce water-logging and mud formation and increased ease of moving about in the area. Nonetheless, additional streetlights are still to be provided in all five areas.
- 94% of respondents report an increase in mental and emotional well-being, and 95% report improvements in their social status or relationships as a result of the provision of infrastructure.
- There have been significant improvements in self-reported health, with 100% of respondents reporting that the health of their family has improved due to the provision of the *SY2SP* facilities and services. Further research is needed to investigate longer term impacts on health.
- Some residents even at this early stage (i.e., after only a three year period between the two studies conducted in 2005 and 2008) report a positive impact from the programme on their employment and income. However, evidence regarding changes in income, expenditures and employment is mixed, and further research is needed to investigate whether this is a long-

term trend, and what the long-term impact of this programme may be on the income and employment side.

- There have been no clear-cut changes in educational levels, or the proportion of children attending school in the short time (three year period) since the baseline survey was undertaken, although literacy rates appear to have increased. It is clear that although infrastructural changes take place rapidly, social changes are more complex and it generally takes more time to see a sustainable change in social as well as economic patterns.

Other Impacts

The community development component of the programme is harder to assess due to the fact there is no real baseline for this. However, there are some positive findings, and it is important to remember that the provision of basic amenities was made possible by the work of MHT and partners in motivating residents to join the scheme and in helping to establish and support the Community Based Organisations (CBOs) in each area. Some examples of findings include:

- 46% of respondents have a savings account with SEWA Bank, the majority opened since the programme began. This can be important to the women's security and peace of mind.
- 38% of respondents use the services of SEWA health workers, the majority of these benefiting from low-cost medicines.
- 81% of respondents report attending a meeting about the programme and 74% received training under *SY2SP*. It is not clear from the survey whether this has had an impact on respondents' daily lives in terms of awareness or civic engagement beyond the process of implementing this particular programme. The continuance and future functioning of CBOs in the area is also not clear as yet, but would be important to follow this up in order to better understand the role that community organizations can play in low-income urban contexts such as those in the areas that participate in this programme.

Outstanding Issues and Recommendations

There is still work to be done to ensure that all households in the study areas have fully functioning facilities, and in following up complaints made by householders. Moreover, some residents within the study areas (especially in Sadgurukrupanagar) have been excluded from the programme because of the location of their homes. The potential implications of this, in terms of the possibility of these households being provided with basic amenities and the implications for relations between neighbours are unclear at present, but should be investigated further.

There remain some potential areas of community development where further work could have an impact, for example in relation to maternal healthcare. In addition, it may be that the reason that fully half of the respondents do not have savings accounts, and find it difficult to save, has an origin in the low and irregular incomes of community members. Infrastructural improvements are a crucial part of community development, particularly with respect to health, housing and the immediate environment, and significant progress has been made in all of these important areas. Still, we must recognize that sustainable livelihoods are the other source of stability in this process. It is likely that the achievements made to date will be sustainable only if additional emphasis is now placed on the livelihood component of this approach to community development. This point is worth following up, in addition to other important aspects of community development, as discussed in this report.

Acknowledgements

This comparison of endline and baseline survey data builds directly on the written reports of the earlier researchers connected with the project, and it is above all to these writers – and to Sara Rusling in particular for her work on the previous study – that the greatest thanks are due.

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Introduction

The rapid growth in the global urban population is one of the most important demographic shifts taking place in the world today. According to 2001 estimates, almost 50% of the world’s population lives in urban areas. This figure is expected to rise in the coming decades, from 2.86 billion people in 2000 to 4.98 billion by 2030, with the vast majority of the growth taking place in developing countries (UN Habitat, 2004/5). A combination of rural-urban migration, natural population growth, and structural transformation of previously rural settlements is the engine which drives this growth. However, as the urban population increases, there has been an

accompanying rise in urban poverty. In India alone, the scale of urban poverty is striking, with an estimated 80 million poor people living in urban areas, totalling 30% of the total urban population (UK DfID). Furthermore, as cities grow, increasing pressure is put on urban infrastructure and services, and the lack of affordable accommodation forces the urban poor to reside in unsanitary and hazardous environments, lacking access to even basic facilities. Urban poverty manifests itself in the sprawling slum settlements which increasingly characterise cities in the developing world today.

Although there is no universally accepted definition of a slum, the word is generally used to refer to a settlement characterised by poor quality housing and lack of infrastructure, often combined with insecure tenure. The UN estimates that globally 1 billion people – a sixth of the world’s population – live in slums, and this figure is expected to rise to 2 billion by 2030 unless concerted action is taken. Furthermore, one in five people worldwide have no access to safe drinking water, and two in five lack even basic sanitation. The severity of the problem is reflected in the UN Millennium Development Goals targets to ‘significantly improve the lives of 100 million slum dwellers by 2020’ and ‘to halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation’.

In many Indian cities, too, rapid urbanisation and inadequate supplies of housing and infrastructure have led to the proliferation of slums. In Ahmedabad, the financial and industrial capitals of Gujarat, there are approximately 1,000 slums [AMC, 2006]. The population of the slums in Ahmedabad has increased faster than that of the overall population, almost doubling in the two decades since 1976 to over 41% of the total population [Dutta and Batley, 1999, as cited by SEWA Academy, 2002]. A large proportion of these slums lack access to even basic water, sanitation and waste disposal facilities [SEWA Academy, 2002].

In the context of such a large number of people residing in these unsanitary and hazardous conditions, it is clear that action must be taken to ensure that cities are able to meet the needs of their expanding populations. Governments have sought to tackle the existence and proliferation of slums through a range of approaches, from demolition and slum clearance to slum upgrading. The UN defines current best practice as ‘participatory slum improvement’ whereby the physical infrastructure of slums is improved, within a holistic approach which also takes into account health, education, livelihood, housing and gender [UN Habitat Features, 2003]. This should also involve the slum community as far as possible in decision-making and implementation.

There are strong arguments for this approach to improving and upgrading slum settlements. Improving living conditions can bring gains for the quality of life, health, and productivity of slum residents, and can help break the cycle of poverty. It can also be a public good, having a positive impact on the wider economy and society. These arguments are outlined in more detail below.

The positive impact of slum improvement on the quality of life of residents is itself a valid reason for undertaking such activity. Life in such settlements in the absence of adequate infrastructure can be precarious, and detrimental to the health, safety and comfort of communities [Hardoy et al., 1997, Karn et al., 2003]. The urban poor who inhabit these areas provide many of the services which keep the city running, yet are often employed in the informal sector, lacking basic rights and excluded from the benefits of urban development. Life in these circumstances is particularly difficult for women [UN Habitat, 2003]. The burden of household work in the absence of infrastructure, for example fetching and carrying water, usually falls to women, who must also struggle to maintain household hygiene in the context of poor drainage and sanitation. It is women who are most vulnerable to harassment or assault when using open areas in the absence of toilet facilities, or due to insufficient street lighting.

Slum improvement benefits the lives of the whole community, but just as it is women who suffer most from living in poor environments, so it is women who may derive the greatest benefit from improvements in infrastructure [e.g., UK DfID, Amis, 2001]. Improvements in water supply and drainage reduce the burden of household work on women and increase their time for economic and social activities. As they also tend to be at home more than men, they benefit from the increased access and public space for household and income-earning activities. Their personal security may also be increased due to street lighting, and sexual harassment when going for open defecation is reduced [WHO/SIWI, 2005, Amis, 2001].

The physical health of the community can also be improved through slum up-gradation. Many commentators have highlighted the link between poor living conditions and ill health [e.g., Hancock, 2000, Devas et al., 2001, WHO reports]. Lack of safe drinking water and poor sanitation can lead to a range of diseases, while factors such as overcrowding and pollution can also contribute to health problems. Karn et al. (2003) in their study on the living conditions and health of the urban poor in Mumbai found that this group had a higher incidence of disease than the general population. The study confirmed the impact of sanitation, as well as factors such as hygiene and income, on morbidity. Diseases caused by poor environmental conditions can itself then reinforce the cycle of poverty. Amis [2001] notes how illness may lead to asset depletion and debt in order to fund private healthcare, and thus 'is one of the most powerful forces pushing households into poverty' [Amis, 2001:106].

Improving slums, for example providing access to water and sanitation, can reduce risks from mosquito habitats and a variety of water-borne diseases [WHO/SIWI, 2003]. This can have benefits not only for individuals' health, but can also serve to reduce their expenditure on medical costs so helping to prevent the spiral of debt and poverty. Improved child health and reduced household responsibilities improves school attendance and educational levels, particularly for girls [WHO/SIWI, 2003].

In the long-term these health gains benefit not just the individuals concerned but the wider economy and society, for example in reduced public expenditure on healthcare and in creating a more educated, productive and healthy workforce. The WHO estimates that simply meeting the MDG target on water and sanitation could result in an annual cost saving to the health sector of USD 7 billion, and an annual global saving to the value of USD 750 million from working days gained as a result of improved health.

Improvements in infrastructure and services, alongside other interventions, can also improve individual productivity and increase economic activity. This operates through the mechanism of improved health increasing the capacity for productive activities [UN Habitat, 2003], but also in other ways. Time saved in fetching water, for example, can itself be better used in economic activity [WHO/SIWI, 2003, Amis 2001]. Other commentators have pointed to the potential for improved infrastructure to increase income-earning opportunities through improving access to the area, increasing the use of outside space and lengthening the working day (for example through the provision of paved roads and streetlights) [Amis, 2001, Devas et al. 2001]. This can have positive effects on home-based enterprises in particular; in Amis's [2001] study, improved infrastructure greatly facilitated women's home based work rolling *bidis* through improving access to raw materials and facilitating delivery of the finished product.

Housing is the most important asset for the poor, and can be used to access other funds and opportunities (for example it can be used as collateral for business loans). Improved infrastructure can stimulate investment in housing itself, and improve the value of housing as an asset for home owners [Devas et al., 2001]. Improvements to slum areas can also improve the overall 'image' of the slum, and can therefore stimulate investment and business/service growth in the area. Amis [2001] found that the provision of paved roads provided a powerful confirmation of the legality of the slum settlements, and hence led to subsequent investment.

These benefits accrue not only to the individuals and communities directly affected, but also to the wider urban environment. It has been noted that one effect of slum improvement is to integrate the slum settlements into the wider life of the city [Amis, 2001]. Improving these areas of substandard housing and infrastructure also contributes to the overall image and health of the city, which is important in improving quality of life and attracting new companies and citizens [Leautier, 2006]. Improved infrastructure can jump-start economies [WHO/SIWI, 2003] and 'is a prerequisite for economic growth in India' [UK DfID].

Provision of affordable civic infrastructure and services is therefore a means to ensure sustainable urban development and makes a key contribution to urban poverty reduction [UK DfID]. The following section considers one such approach to slum improvement, the *Parivartan* programme of Gujarat.

Programme Background

Parivartan in Hindi and Gujarati means 'transformation'. In 1995 the *Parivartan* programme was launched in the city of Ahmedabad, Gujarat, as a partnership between the Ahmedabad Municipal Corporation (AMC), two NGOs (Gujarat Mahila Housing SEWA Trust or MHT, and SAATH), the corporate sector and slum residents. SEWA Bank was also involved in the programme as a community finance institution.

The aims of *Parivartan* were to provide access for poor households to basic physical infrastructure and services. It also aimed to facilitate community development through the participation of communities and NGOs in the management of basic services, and to build a city level organisation for environmental up-gradation.

The *Sahbhagi Yojana 2 Support Programme (SY2SP)* has aimed to build on the success of the *Parivartan* programme and to extend and scale up its slum improvement activities. It takes a participatory approach, with the community involved both in contributing towards the cost of the programme and also being closely involved in its implementation.

The *SY2SP* was developed as a three year programme, which aimed at upgrading 100 slums and including 24,046 households. The achievements and outstanding issues are discussed in this comparison of endline and baseline findings.

Physical Infrastructure

A key aspect of the programme is the provision, on a cost-sharing basis between the Ahmedabad Municipal Corporation and slum residents, of seven basic amenities:

- Water supply to individual households
- Individual toilets and sewerage connection
- Paved roads
- Streetlights
- Solid waste management
- Storm water drainage
- Landscaping

Community Development

A community development component is also included in order to address other socio-economic needs of the community, and to ensure community participation and involvement in decision-making and maintenance of the infrastructure and services. This is carried out by MHT and SEWA partners, through the support of CHF International and USAID. This includes:

- The formation of community groups, for example women's groups and youth activities;
- The mobilisation of community savings and provision of financial services;
- The setting up of healthcare centres, community health education and other interventions;
- The creation of day care centres, local shops and non-formal educational opportunities and the provision of information to facilitate access to government services and benefits.

Security of Tenure

Many slum areas are situated on land which is not legally the property of the slum dwellers. As part of the programme, the AMC therefore grants informal tenure to the residents for a period of ten years. This is a prerequisite for the implementation of the programme in the selected areas. It is an important aspect of the programme, as 'the granting of secure tenure is one of the most important catalysts in stabilising communities, improving shelter conditions, encouraging investment in home based activities which play a major role in poverty reduction, reducing social exclusion, and improving access to urban services' [UN Habitat Feature, 2003].

Programme Financing

The project is funded through a public-private partnership, whereby the municipal corporation finances approximately 74% of the total cost (which is around Rs. 15,800 per household), with the private sector and the residents themselves contributing approximately 13% each. The AMC covers the private sector contribution where there is no private sector partner. Details regarding the respective roles of the different agencies are given below.

Role of the Different Partners in SY2SP

AMC

The SY2SP works with the Ahmedabad Municipal Corporation's Slum Networking Programme (SNP) which aims to transform the urban environment through the provision of physical infrastructure and social services in partnership with NGOs and slum residents. The AMC funds the majority of the costs of the infrastructure and physical facilities and has recently been awarded The Dubai International Award for Best Practices to Improve the Lived Environment by UN Habitat.

USAID

USAID has also provided funding to support MHT in its role in programme implementation, channelled through CHF International as the support agency (as discussed below).

CHF International

CHF is an international development organization, incorporated in 1952 as a 501(c)(3) organization. CHF serves as a catalyst for sustainable positive change in low- and moderate-income communities around the world, helping to improve their housing, economic circumstances, and environments. It works with a wide range of organizations to develop systems, policies, and practices that increase access to

affordable housing, community services and finance. CHF believes that safe, affordable housing is the foundation upon which families can build a livelihood, a healthy community, and a peaceful, democratic society. In terms of *SY2SP*, CHF supports and funds MHT in its community development role.

MHT

MHT emerged as a key partner from the first stage of the Parivartan programme and now plays an important coordinating role. In *SY2SP* this includes community mobilisation and building linkages between the community, the AMC and the other *SY2SP* partners. An important aspect of this is the formation and capacity building of the Community Based Organisations (CBOs), which play a key role in monitoring service delivery and ensuring infrastructure maintenance. In addition to this, MHT's role has expanded to include becoming a contracting partner for the implementation of the infrastructure services. It has also begun to provide training to upgrade the construction skills of women residents of these areas, and to provide them with employment on Parivartan sites.

SEWA Bank

SEWA Bank served as the financial intermediary for the first stage of the Parivartan programme, providing financial services and loans to community members who wanted to participate in the programme. It has expanded this role within *SY2SP*; in addition to the provision of microfinance and loans services to participants, bank staff will continue to meet with community organisations to attract new clients, to train bank *sathis*, provide financial counselling for beneficiaries and monitor their contributions. It will also extend its financial services and financial literacy training. A new initiative called the 'Sahiyaro Utsav', which aims to link home based women entrepreneurs with wider urban markets through a three day trade fair, was initiated in April 2005, and is being run repeatedly nearby to *SY2SP* areas.

Lok Swasthya Mandali (LSM)

During phase 1 LSM played a major role in providing primary healthcare services and health education. Under *SY2SP* LSM's work to provide health trainings and 'camps' for all members of the community, doorstep health services and low cost medicines, and to promote awareness and treatment for diseases such as TB and AIDS, will be expanded. The aim will be to provide approximately 10 new health centres catering to the target areas, expand its partnerships with the AMC, WHO and Government of India to control the incidence of TB and AIDS, and to promote health awareness. LSM will also aim to set up twenty five day care centres in the target areas and will link residents to health and other insurance schemes provided by SEWA.

Foundation for Public Interest (FPI)

The Foundation for Public Interest will aim to build the information infrastructure for the programme through providing GIS (Geographical Information Systems) maps of key socio-economic data for all the *SY2SP* areas, to be used by the other partners. FPI will also distribute maps to residents of these areas and disseminate information about the programme through two publications, the monthly Nagar Vikas Dagar and Parivartan Patrika. It will aim to facilitate communication and information sharing between the AMC and the community, through the formation of Community Resource Centres (CRCs) and Report Cards through which residents can report on the status of infrastructure in their area. Trainings for CBO members have also been developed and implemented.

The Slum Residents

Residents of these areas are also key stakeholders in the programme. They must not only contribute financially to secure these infrastructure services, but must also form a CBO (Community Based Organisation) through which they monitor service delivery and take responsibility for ensuring the maintenance of the facilities after implementation.

Study Design and Methodology

A baseline survey was undertaken in November/December 2005, the results of which were presented in a report delivered in April 2006. This research was followed up by a subsequent survey in November 2008, and the current report should be seen as an endline analysis, presenting the results of the endline survey and commenting on impacts to date. The specific objectives of the study as a whole are:

1. To assess the direct impact of the programme in terms of the improvement in the physical infrastructure and services of the slum residents;
2. To assess the indirect impact of the programme on the income, education and health of the slum residents, as well as on their interactions with local government and uptake of financial services;
3. To make suggestions for the future implementation of important aspects of the programme.

Sampling

The study focuses on five slums in the city of Ahmedabad where the programme is being implemented. These are Kamdarnagar, Narsihji Na Chapra, Ramesh Dutt Colony, Satgurukrupanagar and Sanjaynagar. The rationale for selecting these areas was to ensure the inclusion of a range of slums of different sizes, with varying levels of basic services and residents of different occupations, in various geographical locations in the city. In addition, the implementation of the infrastructure services was due to begin at approximately the same time in all five communities. The map below shows the location of the five slums within Ahmedabad and is followed by a brief overview of the areas.

Figure 1: Map of the study area



Note: Kamdarnagar appears as Khodyarnagar in the above

Ramesh Dutt Colony is located in the North Zone of the city. It includes 326 households which are eligible for the SY2SP, although the slum itself is significantly larger, at around 800 households. Land ownership is fairly complicated in the area, and is a mixture of private and AMC land, although the programme is being implemented for households on AMC-owned land only.

Sadgurukrupanagar is in the East Zone of the city and is comprised of approximately 240 households. It is sited on private land.

Kamdarnagar is in the West Zone of the city and is made up of approximately 160 households. Some of the land is owned by the AMC and some is private.

Sanjaynagar is located in Amraiwadi in the East Zone of the city and is home to approximately 123 households. The settlement is located on AMC-owned land.

Narsinghji Na Chappra is also in the East Zone of Ahmedabad and contains approximately 38 households. The settlement is sited on AMC land.

For the baseline survey, a sampling frame was drawn up of all households in the five areas using lists of households provided by MHT. The total number of households was 887 and from this a random sample of every third household was selected, giving a final sample of 285 households, with 1,522 household members. At the time of the endline survey, it was not possible to re-visit all of the original sample for several reasons. Firstly, some original respondents had moved on, were absent for

an extended period or had died. Secondly, it transpired that in the time since the baseline survey, some households had been excluded from the scheme, primarily because the land on which their home was built had subsequently been designated for other development, or at least as not qualifying for inclusion in the programme. This latter consideration applied particularly to Sadgurukrupanagar, where approximately thirty households had subsequently been excluded from the programme and had therefore received none of the infrastructure facilities. The following is a breakdown of the number of households interviewed in each area at the time of the baseline and the endline surveys (Table 1).

Table 1: Number of Households Surveyed in 2005 and 2008

Area	Households surveyed	
	Baseline Survey (2005)	Endline Survey (2008)
Ramesh Dutt Colony	111	69
Satgurukrupanagar	80	35
Kamdarnagar	49	29
Sanjaynagar	31	20
Narsihji Na Chapra	14	11
Total	285	164

Data Collection

For both the baseline and endline surveys, the questions were administered in Gujarati to the female contact person who appeared on the list of numbered residences provided by MHT. Every effort was made to speak to the same respondent on the return visit, but when this was impossible due to a long-term absence, a substitute woman who had resided in the same household for at least two years was interviewed.

In addition to the interview itself, the researchers completed an observation sheet, recording the building materials and number of rooms of the dwelling. An observation sheet of the neighbourhood, including presence of streetlights and paved roads, was completed by the research coordinator.

Data Entry and Analysis

The closed questions in the survey were pre-coded, but all open questions were assigned codes after data collection was completed. The information from the forms was entered into two SPSS data files, and analysed accordingly, primarily using descriptive statistics. Chi-Square tests were used to establish the significance of some cross tabulations.

Limitations of the Study

These are in addition to the more specific limitations highlighted in the baseline report. The baseline fieldwork took place during working hours which may have introduced an element of bias into the sample. This is because some women who are in formal employment, such as factory workers or municipal cleaners, were unavailable at this time. It is therefore possible that the sample is skewed towards women in less formal (and perhaps less well remunerated) employment. However, this does not preclude the fact that other members of their households could hold these salaried jobs.

The data on illness relied on the respondents' reports of the illnesses suffered by both herself and her household over the past month and the past year. It is therefore not necessarily confirmed clinical cases but self reported symptomatic illness. Furthermore, this clearly has potential for error as it relies on the accurate recall of the respondent for all members of her household over this period. There is a likelihood therefore that the data on illness represents an underestimate of the true burden of disease in these areas. In particular, less severe illnesses are likely to go unreported. There were also difficulties with the way in which the data on illness was collected, particularly at the baseline stage, which may affect the reliability of results (see baseline report for details).

Furthermore, while checks were done on the income and expenditure data, some anomalies remain. For example a small number of households reported very low income and/or very low expenditure on basic necessities such as food in the baseline survey particularly. There were also several cases where expenditure far exceeded reported income. These difficulties in obtaining accurate estimates of real income have been documented in other studies [e.g., Islam et al., 1996], and estimated expenditure levels are also prone to error [Karn et al., 2003]. These limitations should be borne in mind when considering the data.

It must also be remembered that all figures from the endline survey apply only to those households who proceeded with participation in the programme – all those who were excluded, for example due to the location of their homes, are not included in the results presented here; the figures are therefore not necessarily representative of the area as a whole. These exclusions, and the fact that it was sometimes necessary to take a substitute respondent from within the original household, clearly introduce greater potential for error.

Finally, the study design does not include a control group, so while it is clear that some changes are directly related to the provision of infrastructure, for others it is more difficult to establish this empirically.

Status of the Five Areas at the Time of the Baseline and Endline Surveys

At the time of the baseline survey, the physical infrastructure package had not yet been implemented in the five study areas. However, the partners – MHT, SEWA Bank, LSM and FPI – had already been active in these areas for a number of years. The presence of MHT in these communities in order to mobilise the residents to join the scheme was a prerequisite for the programme to be implemented in the first place. However, the other partners had also been involved since 2001 and had carried out a range of different activities in each area, including:

- Providing maps, training, information and feedback mechanisms to link the community with local government, and establishing Community Resource Centres (FPI);
- Running health camps and awareness campaigns, providing primary health care services (LSM); and
- Facilitating the collection of community contributions and providing a range of financial services such as savings and loans (SEWA Bank).

The extent of these activities varied somewhat according to the area, but it is highly probable that in all areas these activities had already had some impact on the health, financial behaviour and awareness/engagement of residents by the time of the baseline survey. Thus the initial survey was essentially not a baseline in relation to the community development component of the scheme, and this must be considered when comparing the baseline and endline survey results. It is therefore more accurate to see this community development component as a long-term process which began long before and will continue beyond the time-span covered by this research.

Furthermore, through the work of the project partners some facilities and services had already been secured by the time of the baseline survey. Although not strictly part of the *SY2SP*, electricity had been provided to many of the households in the five study areas. The solid waste collection services which are part of the programme had also already begun at the time of the baseline.

The following sections present the key findings emerging from comparison of the two surveys. More detailed background results on demographics, work activities in the areas, etc. are available in the baseline report.

Key Findings: Comparing Baseline and Endline Indicators

Household Demographics

The average household size is five persons for both surveys, while the sex composition differs very slightly between these two surveys. In the baseline survey of 2005, the percentages of male and female household members were 53% and 47%, respectively, while the percentages were 51% and 49% for males and females, respectively, in the endline study of 2008. The age distribution pattern of household members is also more or less the same in both of the surveys. A predominantly young population was seen in both of these surveys: about 60% of the population fell into the age group of 25 years and below; around 40% was in the 26 to 64 year old group; and only 1% of the population was 65 years and above in both of the surveys.

House Construction: Materials and Number of Rooms

In both the baseline (2005) and endline (2008) surveys, the majority of houses in the samples were permanent structures, constructed of materials including bricks and cement, concrete, and mud and bricks for walls, with roofs of concrete, galvanized iron/asbestos sheets, and cement sheets (i.e., materials that are considered superior or stronger in nature). An improvement was thus seen in the materials used over time: in the baseline study 5.6% of houses (17 out of 285) were reported as having a canvas/felt/plastic roof (i.e., a roof made of inferior/weaker materials), while in the endline survey only one house (0.61%) out of 164 was reported as still having a canvas/felt/plastic roof. However, regarding the number of rooms, the comparison is not as straightforward and in fact is quite counterintuitive, probably due to the difference in the sample selection: in the endline survey 44.5% (73 of 164) of houses were reported as having only one room, in comparison with 31% in the baseline study; in 2008, houses with 2 rooms were reported as totalling 45.7% as opposed to 55% in the baseline survey; and in 2008 houses with more than two rooms were reported as totalling 9.7% as opposed to 14% in the baseline study. Again, this is probably due to the sample selected, and would not be an indication of change over time (larger, not smaller, houses would be the expected outcome).

Physical Infrastructure

At the time of the baseline survey in 2005, respondents reported a range of problems stemming from the lack of basic amenities in their area. These included the accumulation of mud, sewage and waste-water in the area and the flooding of

homes with effluent, especially during the monsoon period, all caused by the lack of adequate gutters, drainage and paved roads. This in turn was viewed as causing mosquitoes to proliferate in the area, leading to illness and disease epidemics.

These problems were particularly acute in Ramesh Dutt Colony and Sadgurukrupanagar. Many women were forced to use open areas due to the lack of individual toilets, made more difficult by fear of going out after dark and causing embarrassment and inconvenience. Others had to spend long hours queuing for unhygienic public toilets. Moreover, women without water connections spent on average two hours per day collecting water, and quarrels between women in some areas resulted from the lack of facilities to dispose of waste water. The majority of women also reported that the lack of sufficient functioning streetlights in their area meant they were afraid of going outside after dark, such fears leading to restrictions on their movements and that of their children.

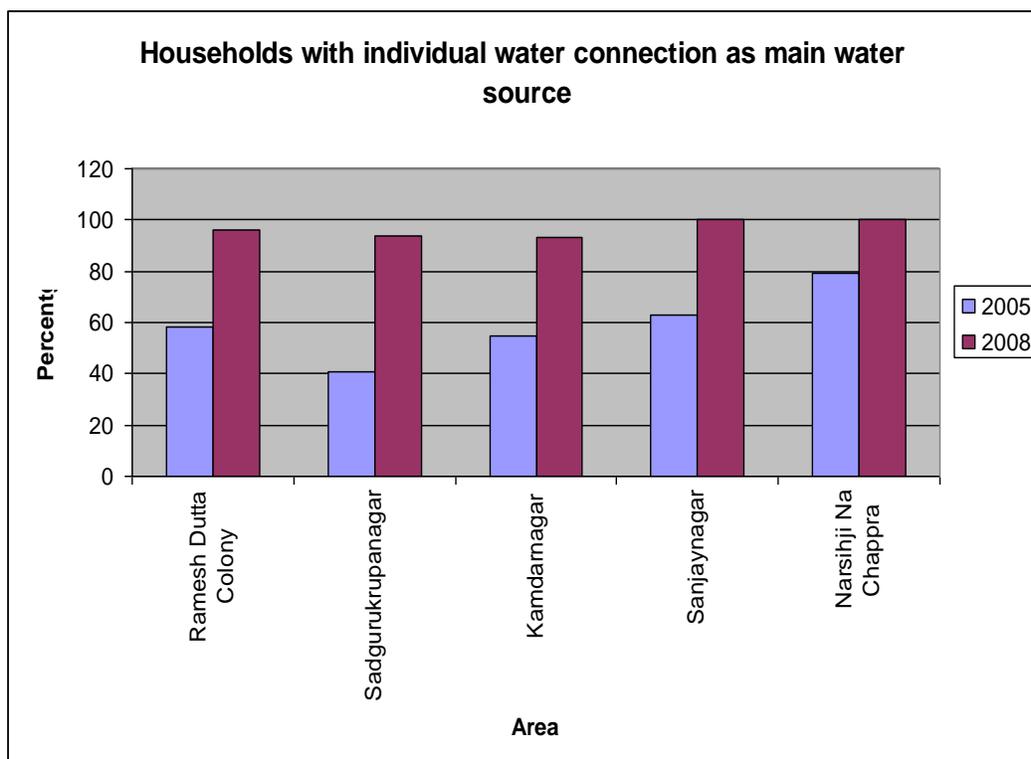
However, at the time of the survey in 2008, a number of changes are apparent¹:

1. Water

- There has been a great improvement in the availability of water in the five study areas. Overall, about 96% of respondents now have an individual water connection at their home, compared to 54% in 2005. In 2005, 25% of respondents used public taps as their main water source; however, in 2008 not a single person reported using a public tap as the main source of water.
- Similarly, the proportion of respondents using a neighbouring house as the main source of water was reduced from 21% in 2005 to 4% in 2008. The change in individual water connection is shown for each of the areas below:

¹ In some cases explicit comparisons can be made with data from the baseline survey (again, with the qualification that a different sample of respondents was necessary and thus direct comparisons are often difficult to make). In other cases, respondents were asked to comment on the changes they experienced in the last three years (i.e., the years of the programme), and for these questions only the 2008 responses are provided, since the answers themselves are intended to indicate the direction of change over time as perceived by those surveyed.

Figure 2: Respondents with an individual water connection as their main source of water, by area, 2005 and 2008



- It may be worth noting that in 2008, of the total respondents who did not have individual water connection but reported collecting water from a neighbouring house as their main source of water, 4% are in the 10 to 14 year old age group (which may or may not have implications regarding their schooling), and 88% are female (probably an indication of this gender-designated role).
- Other positive responses also indicate improvements in the provision of water: 95% of respondents reported being happy with the water pressure of their individual connection, while the corresponding figure for 2005 was 80%. Similarly, in 2008, 96% said that the time they have access to water each day is sufficient for their needs (no comparable earlier figure is available).
- The table below shows the change in amount spent on individual water connections. Overall, the expenditure on water has increased. In 2005, the vast majority of the respondents (86%) paid Rs. 1500 or less; however, the corresponding percentage in 2008 was only 10%. Similarly, the vast majority of those respondents (88%) who had individual water connections paid more than Rs. 2000 in 2008, while this proportion was only 7% in 2005.

Table 2: Total Expenditure (in Rs.) for Water Connection, 2005 and 2008

Expenditure in Rs.	2005		2008	
	Frequency	%	Frequency	%
500 or Less	52	34	1	1
501 – 1000	49	32	1	1
1001 – 1500	31	20	14	8
1501 – 2000	13	8	3	2
2001 – 2500	3	2	137	87
More than 2500	7	5	1	1
Total	155	100	157	100

- For those without an individual connection, or using more than one source of water, the average time taken to collect water in 2008 decreased to 88 minutes per day, as compared to 120 minutes (2 hours) in 2005. As in the baseline survey, a small number of respondents spent a large amount of time with daily water connection; even in these cases, however, the maximum time taken up in collecting daily water was reduced from 12 hours maximum time in 2005 to the 5 hours maximum time per day reported in 2008.
- Furthermore, in 2008 96% of respondents reported that there had been changes in their lives attributable to having an individual water connection. The most commonly mentioned changes were being able to reach work on time (68%), followed by not needing to go outside to collect water (29%), time saving and an improvement in cleanliness of the surrounding area (26%), and no problem in getting water (1%). The majority of respondents (93%) indicated that they used any time saved for their household work, while a minority (7%) reported using the extra time in income-earning activities, with 32% indicating that their income had increased as a result. However, it must also be noted that while the vast majority of households now have an individual connection, at least seven households in 2008 still needed to use a neighbouring house as a water source (apparently because their individual connections were not functioning properly). Of those recorded, three of those without a functioning connection were from Ramesh Dutt Colony, two are from Satgurukrupnagar and two are from Kamdarnagar.
- In response to another question on changes in personal relationships, 95% of respondents in 2008 mentioned that quarrels over water had now ceased, indicating an improvement in community relations due to the provision of individual water connections.
- The proportion of respondents using filters has also increased, as reported in the endline survey (94%) as compared to the baseline survey (81%). Similarly, water availability time has increased; for example, in 2005 9% of the respondents reported water being available for less than an hour, but this proportion decreased to 5% in 2008.

- The majority of the respondents (78%) in 2008 did not complain to anyone about the water situation, whereas in the baseline survey the corresponding figure was 66%. Among those who complained (22%), 20% complained to the AMC and the remaining 2% complained to SEWA and CBO members.
- Bathing patterns have also improved over the three year period. 71% of the respondents in 2008 reported bathing in a separate private bathroom, while this percentage was only 42% in 2005. Similarly, only 29% of the respondents now bathed in an open space (inside or outside of the house) in 2008; in 2005 this proportion was 58%. Furthermore, 98% of the respondents in 2008 reported that they bathed at least once a day, while the corresponding figure in 2005 was 95%.

2. Toilets

- 99% of households reported in 2008 that they have an individual toilet, as compared to 54% in 2005. Out of these 163 households having individual toilets (i.e., the above-mentioned 99% of households), 95% were reported to have properly functioning toilets, while the remaining 5% noted that their toilets have at least one problem; however, this latter proportion has decreased from 12% in 2005. (Problems of individual toilets include water accumulation due to a narrow outlet [44%]; gutter overflow causing household members to go out for defecation [33%]; stinking when the gutter overflows [11%]; the need to clean it when waste water overflows [11%], etc.) In 2008, one household that did not have an individual toilet facility reported facing difficulties (in specific, they expressed fear in going out alone in the dark to open areas when ill, especially with diarrhoea).
- Women in particular reported an improvement over time: in 2008 only one woman out of 164 (0.6%) reported going for open defecation, as compared to 24% in 2005.
- The problems highlighted in the baseline study for those without an individual toilet include the following: fear of going outside at night, shame and embarrassment experienced by those going for open defecation, as well as problems relating to the lack of cleanliness, unhygienic conditions, and queues for public toilets. All of these problems had been greatly reduced by 2008, and 94% of respondents reported positive changes due to the provision of toilet/bathroom facilities. Those respondents who stated that there was a positive change were asked more detailed questions about the nature of these positive changes. Out of 154 respondents (94% of total respondents), one-third mentioned that the most important change was that they no longer needed to go to open spaces for defecation; this was followed by the fact that they could now use their own toilet instead of being ashamed to go (30%);

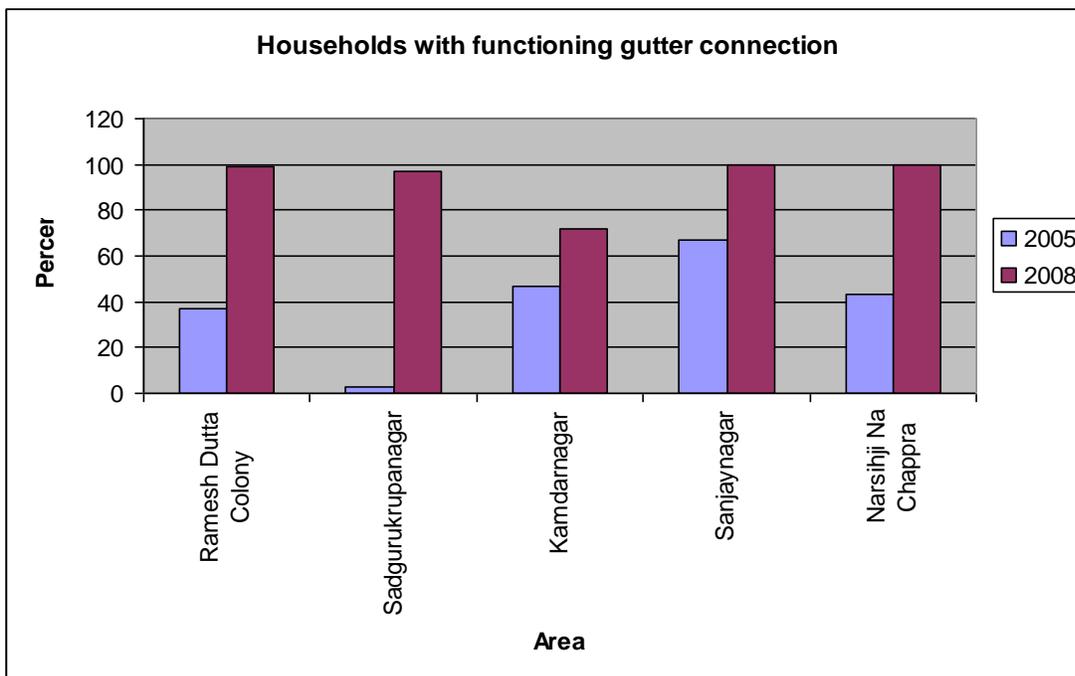
that they no longer needed to go outside for the toilet during the monsoon period (26%); and that they no longer needed to fear going outside (11%).

- The highest proportion of households without an individual toilet was in Kamdarnagar, where some residents had chosen not to take these facilities due to the lack of adequate space for locating them. (Households in Kamdarnagar pay Rs. 10 per month for the communal toilet as they have drainage problems.)

3. Gutter connections

- All households in 2008 had individual gutter connections; 94% of these were functioning properly, compared to only 32% functioning well in 2005 (see Figure 3).
- 27% of the households with gutter connections reported functioning problems in 2005; this proportion had been reduced to 6% in 2008. Problems highlighted in the baseline report – including overflowing gutters leading to the accumulation of foul-smelling water and mud, and flooded houses, which in turn contributed to the presence of mosquitoes and disease, as well as conflicts over the disposal of waste water – are less common now, and 94% of the respondents report improvements in their lives due to the provision of gutters.

Figure 3: Respondents with a functioning gutter connection, by area, 2005 and 2008



- In Narsingji Na Chappra and Sanjayanagar, the gutter connections are reported as functioning without any problem. However, a small number of households including eight households (28%) in Kamdarnagar, one household (3%) in Satgurukrupanagar, and one household (1%) in Ramesh Dutt Colony are still experiencing problems with their gutter connections.

4. Storm water drainage

- Problems related to storm water drainage have been almost completely solved in these five areas. In 2008, all households now report having almost no drainage problems, while 77% of the respondents in the baseline survey mentioned at least one problem (such as one or more of several problems, including water accumulation, blocked lanes, flooded homes, etc.). In 2008, all respondents stated that they experienced positive changes due to improvements in the storm water drainage system: 51% said that water drains away quickly (without water logging), and 49% said that there had been a reduction in mud formation.

5. Roads

- At the time of the endline survey, roads had been paved in all areas. 100% of the respondents in each of the five areas said that their roads/lanes were fully paved. Moreover, almost 100% of respondents in these areas report that having paved lanes has led to improvements in their lives over the programme period. The most frequently mentioned changes are ease in moving on the roads (30%), no water logging in the monsoon season (26%), no mud formation on the road (18%), vehicle movement became easy (17%), and the roads became clean (9%). In the baseline survey, respondents reported that they were facing problems of moving around, as well as unhygienic conditions which was a cause of disease. Furthermore, in the baseline survey 94% of the respondents expressed that they were suffering from difficulties due to unpaved or poorly paved road conditions. These problems were more acute in Ramesh Dutt Colony, Sadgurukrupanagar and Sanjaynagar. In the endline survey respondents in these areas expressed relief that these problems had been eliminated.

6. Streetlights

- No additional streetlights have been provided in any of the five areas. Residents therefore continue to experience the same problems highlighted at the baseline; difficulties moving about the area after dark and fear of doing so.

7. Waste collection

- The solid waste collection and cleaning schemes were already up and running at the time of the baseline survey. However, overall 98% of the respondents report that these schemes have led to improvements in the cleanliness of their area. All areas except Satgurukrupanagar have cleaning arrangements and garbage collection facilities; however, 3 households (9%) in Satgurukrupnagar expressed that they had still no cleaning arrangements in their area and no one was coming to collect garbage from their homes.
- 98% of the respondents expressed that there had been positive changes due to an improvement in waste collection. Furthermore, more than half of the respondents (51%) mentioned that the most significant positive impact was increased cleanliness in area; 49% also reported an improvement due to the fact that women were now coming to collect the garbage and consequently people had stopped throwing waste outside.

8. Wider impact of the physical infrastructure

- In 2008 the vast majority (93.3%) expressed positive responses, or an increase in their mental and emotional well-being, due to the provision of the new infrastructure and services. Only 6.7% reported negative reactions or the opinion that nothing much had changed for them (in terms of their mental and emotional well-being). Among the primary reasons for an increase in mental peace and satisfaction was that water is now available in the house (37.8%); this was followed by mental peace due to the new 'seven facilities' associated with the programme (32.6%); simply that mental peace has increased without specifying further (15.6%); and mental peace because lanes are now cleaned (13.6%). The major reasons for dissatisfaction of 11 respondents (out of the total 164) is that they still need to bring in water from the outside (45.5%); the gutter outflows (36.4%); and water comes slowly (9%).
- Regarding change in social status or relationship with others due to the seven facilities of the programme, the vast majority (94.5%) of the respondents reported satisfaction or an improvement in their social status while only 5.5% expressed dissatisfaction or no change in their social status or relationships with others. The respondents who were satisfied with their social status were asked additional questions about the reasons for satisfaction or improvements in relationships with others; the response to this question

shows that the reduction of quarrels over water (58%) was the main reason for their satisfaction, followed by more guests now visiting them due to improvements in the seven facilities provided by the programme (42%).

Work, Income, Assets and Education

- The respondents in the endline survey were asked whether there had been any change in income level or employment status due to changes in the seven facilities of the programme. It is notable that only 27.4% thought that the programme brought significant positive changes in their income or employment status, while the vast majority (72.6%) of the respondents gave negative responses or said that nothing much had changed. This might indicate that although infrastructural changes can be made relatively quickly, social and economic changes are likely to take more time, as well as being subject to other influences, including the general economic conditions and trends of that location.
- Those surveyed were further asked about the reasons behind the change (if any) in employment or income. Out of 45 positive responses, more than half (51.1%) said that it was now possible to finish work quickly due to the provision of the seven facilities. Other reasons cited were that they now experienced an increment in income due to the new water facility (22.2%), and that it was now easier to do work in the house (8.9%). Among the negative or 'no change' responses (119 out of 164), the major reason of dissatisfaction was that they had the same income level as before (55.5%), followed by the response that they were doing the same work with the same income level (43.7%), as seen in Table 3 below:

Table 3: Status of Change in Income or Employment, with Reasons for Change, 2008

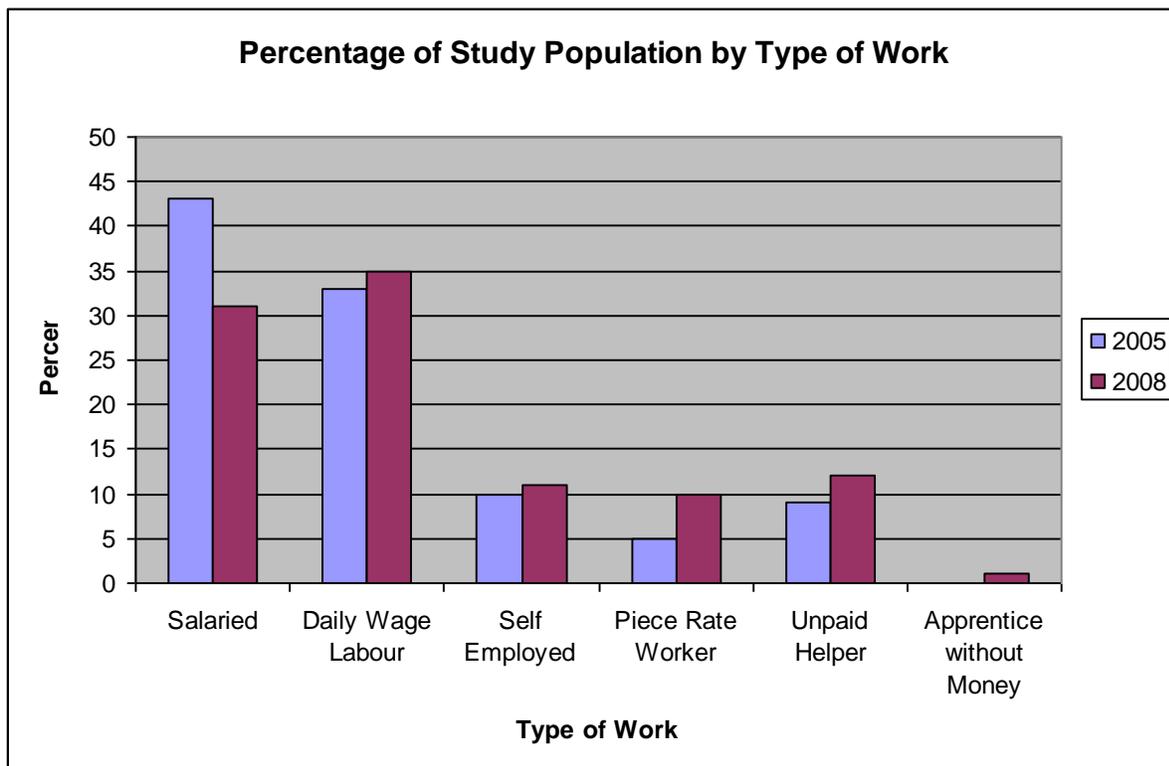
Status of Change in Income or Employment	F	%	Reasons for Positive Change	F	%	Reasons for Negative Change or No Change	F	%
Yes	45	27.4	Work finished quickly	23	51.1	Not increased income	66	55.5
No	119	72.6	Increment in income from water facility	10	22.2	Doing same work with same income	52	43.7
			Work can be done in house	4	8.9	Facilities are same as before	1	6.8

			Increased income	8	17.8			
Total	164	100	Total	45	100	Total	119	100

Note: F and % denote the frequency and percentage for each column, respectively

- As shown in Figure 4, the pattern of employment has changed slightly as indicated when one compares the endline survey to the baseline survey. In the baseline survey a relatively high proportion (44%) of respondents were salaried employees, while this proportion was only 31% in the endline survey. A high proportion (35%) of the respondents in the endline survey were working as daily wage labourers, which is not very different from the 33% in the baseline survey. The other work done by the respondents of the study area was self-employment (10% in the baseline survey and 11% in the endline survey). Interestingly, there was a significant increase in piece rate work from the baseline (5%) to the endline survey (10%). Moreover, the proportion of unpaid helpers also increased by 3% (from 9% in the baseline to 12% in the endline).

Figure 4: Respondents by type of work, 2005 and 2008



- If the employment pattern is analysed according to the gender status of the population, a significant variation is found between men and women. For example, a high proportion (45%) of men worked as daily wage labourers

while this proportion was only 19% in the case of women. Among women, a significant proportion (37%) engaged in salaried work while this proportion was only 27% for men. Moreover, more than one-fifth (21%) of women worked as unpaid helpers, while this was only 7% in case of men. Piece-rate work was also more prevalent among women (13%) as compared to men (8%).

Table 4: Distribution of Study Population by Gender Status and Type of Work, 2008

Type of Work	Male		Female		Total	
	F	%	F	%	F	%
Salaried	71	27	55	37	122	31
Daily Wage Labour	116	45	28	19	137	35
Self Employed	31	12	15	10	45	11
Piece Rate Worker	21	8	19	13	40	10
Apprentice	1	0	0	0	1	0
Unpaid Helper	17	7	32	21	49	12
Apprentice without Money	2	1	1	1	3	1
Total	259	100	150	100	397	100

Note: F and % denote the frequency and percentage for each column, respectively

- Regarding paid work overall, there has been no significant change in the proportion of men and women engaging in or helping with paid work in the four areas. Regarding home based workers in particular, according to this comparison the proportion of home based workers remained roughly constant over time: in the endline survey it was 24%, as opposed to 26% in the baseline survey. The general pattern of home based work remained the same in both surveys, with the most common home based work (according to endline survey) being manufacturing/craft-based activities such as making *chappals* (slippers – 28.2%), stitching *moti* (stone) on *duppatta* (shawls) (15.4%), general stitching (10.3%), etc. This was followed by small trades such as cattle rearing (7.7%), making necklaces (5.1%), selling wood (2.6%), selling biscuits and chocolate (2.6%), and food processing (2.6%), in addition to other economic activities. Furthermore, in 2008 72% of home based workers reported working inside the home while the remaining 28% reported working outside the house, in the courtyard or on the veranda. Similarly, working hours for more than one-third (36%) of the workers were reported as 8-12 hours, followed by 1-4 hours (36%) and 4-8 hours (28%).
- In the baseline survey, the majority of home based workers (53%) reported facing difficulties when they work at home; however, this proportion was reduced to 28% in the endline survey. The most common difficulty in both surveys was interruption by guests visiting.

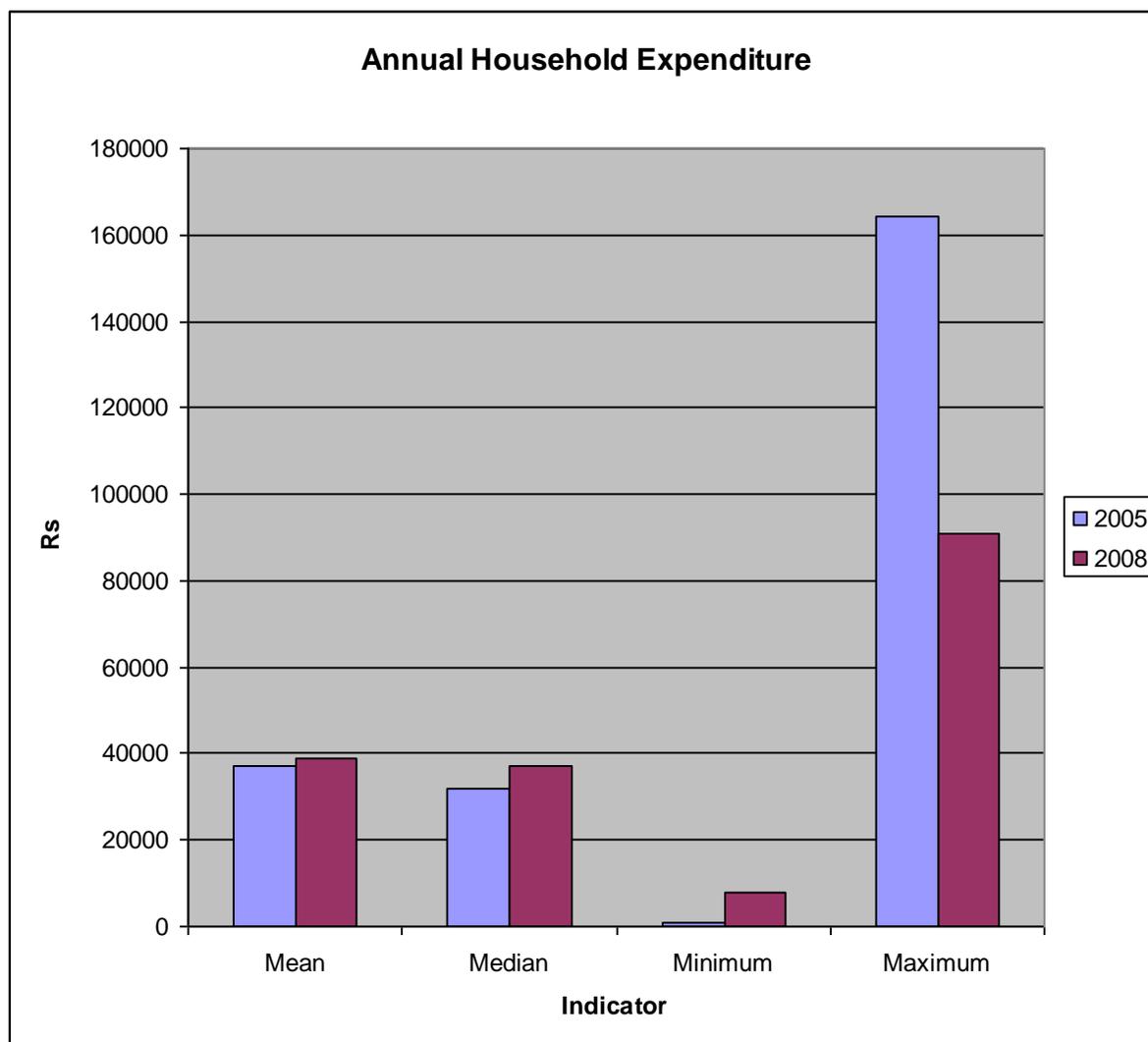
- There has been a significant increase in reported annual household income at the time of the endline survey, from a mean of Rs. 41,161 in 2005 to Rs. 65,582 in 2008; there was also significant increase in the median annual income from Rs. 33600 in 2005 to Rs. 54000 in 2008, as shown in Table 5 below:

Table 5: Total Annual Household Income, 2005 and 2008

	2005	2008
Mean	41161	65582
Median	33600	54000
Minimum	480	14400
Maximum	180000	288000

- However, it is impossible to say whether this is the result of the *SY2SP* programme, or simply due to inflation or other factors. Due to difficulties measuring reported income (some figures from the baseline survey are unrealistically low – as seen, for example, in the reported Rs. 480 annual income), expenditure data are often used in preference to income data. As opposed to the income data cited above, there has been no significant change in reported total annual expenditures between the two surveys (see Figure 5 below):

Figure 5: Annual household expenditure, 2005 and 2008



- Nonetheless, there is a perception amongst some respondents that their income has increased as a result of the programme. For example, 27.4% of respondents reported that there had been changes in their employment patterns or income as a result of the programme (Table 3), and significant increases in incomes were reported (Table 5). Whether directly attributable to the programme or not, the positive perceptions of change set a good basis for future undertakings, which is notable in itself.
- Regarding assets (apart from housing improvements), there is no clear pattern of change in ownership of assets between the baseline and endline surveys. An increase in kerosene stoves, gas stoves, fans, radios/tape recorder/DVDs, TVS, refrigerators and other assets – particularly telephones – was seen between the two surveys (see Table 6). On the other hand, a

small reduction was reported in the ownership of bicycles, two wheelers (scooters), livestock, carts/tables, and water tanks between the two surveys. Some items listed below were assets noted in the 'other' category (these items were written in without more information); thus, it is difficult to make clear comparisons in these cases.

Table 6: Types of Assets Owned, 2005 and 2008

Name of Asset Owned	Baseline (as a % of total respondents)	Endline (as a % of total respondents)
Kerosene stove	79 (%)	80 (%)
Gas stove	36	44
Fan	90	98
Radio/tape recorder/DVD	52	59
TV	72	85
Telephone (cell or landline)	9	54
Refrigerator	5	9
Bicycle	60	52
Two wheeler (scooter)	10	9
Sewing Machine	(n/a)	8
Livestock	7	8
Cart or table	7	1
Water tank	30	27
Other: plot of land	1	1
Other: chula stove	(n/a)	2
Other: pedal rickshaw	1	1
Other: house	(n/a)	2
Other: shop	1	0

- Regarding school attendance, there have been no significant changes in sex composition and age composition of children attending school since 2005. In 2008, out of a total of 211 children reported to be in school, about three-fifths (58%) are boys and the remaining 42% are girls. In all age groups, the proportion of boys exceeds the proportion of girls. The highest proportion of both boys and girls were in the 10-14 year old age group, followed by 5-9 year olds and the less than 5 year old age group.
- Literacy rates appear to have improved over time. As shown in Table 7, the percentage of the illiterate population was reduced from 41% in 2005 to 34% in 2008. For males, illiteracy was reduced from 23% to 19%, while the corresponding figure for females was a reduction from 59% to 48% in 2008. The percentages of primary education have increased slightly for both males and females (see Table 7); however, the percentages of secondary school

education are lower, and the percentages of higher secondary, graduates and post graduates were generally the same in both surveys.

Table 7: Educational Status of the Study Population, 2005 and 2008

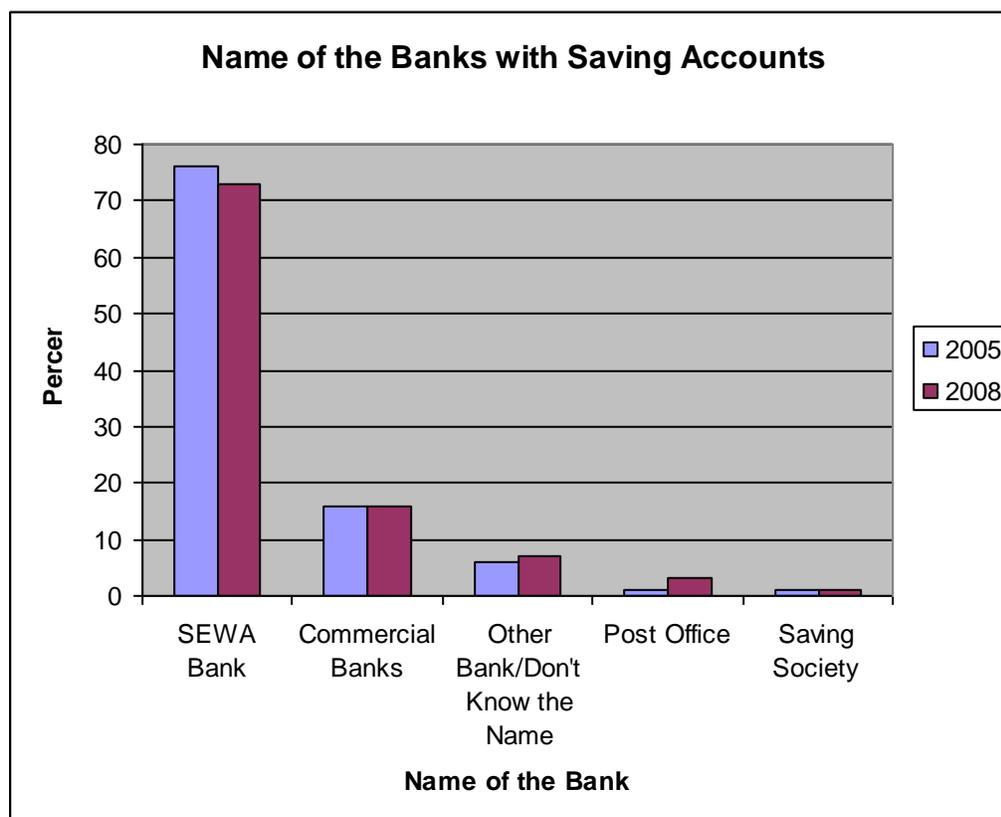
Educational Status	Men				Women				Total			
	2005		2008		2005		2008		2005		2008	
	F	%	F	%	F	%	F	%	F	%	F	%
Illiterate	99	23	56	19	240	59	148	48	339	41	204	34
Primary School	115	26	131	45	71	18	118	38	186	22	249	41
Secondary School	182	42	94	32	76	19	38	12	258	31	132	22
Higher Secondary	16	4	8	3	11	3	6	2	27	3	14	2
Graduate	17	4	3	1	4	1	0	0	21	3	3	1
Post Graduate	1	1	1	0	2	0	1	0	3	0	2	0
Total	430	100	293	100	404	100	311	100	834	100	604	100

Note: F and % denote the frequency and percentage for each column, respectively

Savings and loans

- All households in the five areas in the endline survey reported having a PP (Parivartan) account through SEWA Bank; all respondents had a PP account that had been established by the time of the baseline survey as well.
- A large proportion of respondents (46%) have savings accounts, according to the endline survey, although this is a percentage slightly lower than that of the baseline survey (50%), which again is likely to reflect the sample selection. The patterns of savings distribution across banks are more or less similar in both of these surveys: the majority of the respondents had their account in SEWA Bank (73% in the endline and 76% in the baseline survey), followed by other commercial banks (16% in both endline and baseline surveys). Some of the respondents did not know the name of the bank in which they had their savings accounts (see Figure 6).

Figure 6: Where respondents' savings accounts held, 2005 and 2008



- About one-fourth (23%) of the respondents in the endline survey reported that they had opened their savings accounts prior to 2001, while the vast majority of accounts have been opened since 2001 when the SY2SP began – specifically, 75% in the endline and 88% in the baseline survey. Again, there has been no significant change in the percentage of respondents with a savings account since 2005.
- There has been an increase in the proportion of those who report that they save regularly – i.e., 49% of those with a savings account, while this proportion was only 43% in 2005. (Interviews indicated that saving can be very important in improving the financial situation and emotional well-being of women, with some respondents reporting, for example, that their SEWA bank accounts give them a feeling of security for the future.) The other side of this, however, is the fact that the majority of those with savings accounts still find that they cannot save on a regular basis, probably due to their low and irregular incomes.
- There has been a reduction in the number of respondents reporting taking a loan in the last three years, falling from 42% to 21%. The possible reasons for this are unclear. SEWA Bank is now the second most frequently cited

creditor after relatives, in contrast to the baseline results where it came third behind 'relatives' and 'employers', and on the same level with 'friends'. Loans taken from commercial banks were not reported in the endline survey, although loans from this source totalled 11% in the baseline survey; 6% of the respondents took loans from the municipality in the endline survey, an increase from zero percent in the baseline survey. Furthermore, the average amount of loan taken by the respondents increased from Rs. 14789 in 2005 to 26103 in 2008, and the median amount of loan increased from Rs. 7000 in 2005 to Rs. 10000 in 2008. However, the minimum loan amount remained unchanged, i.e., Rs. 500.

- Currently, the most common purpose of loans is for medical expenses (26%) and home maintenance or upgrading (23% – this came third in 2005). This could indicate the need to alter homes due to the SY2SP work, or increasing investment in homes, or a combination of factors. The third highest reported purpose of loans was for religious and social events, which ranked first in 2005 (see Table 8). However, none of these changes are statistically significant due to the small sample sizes. 9% of the respondents had taken out a loan in 2008 for debt payment (loans for this purpose were not reported in the baseline survey); loans for purchasing electricity meters, land, and for education were not reported in the endline survey (Table 8).

Table 8: Purpose of Loans, 2005 and 2008

Purpose of Loans	2005		2008	
	F	%	F	%
Medical Expenses	26	21	9	26
Home Maintenance/Upgrading	21	17	8	23
Special Events (Religious and Social)	33	27	7	21
Debt Payment	-	-	3	9
Equipment/Materials for Work/Business	13	10	2	6
Food	4	3	2	6
Purchasing Large Household Items	9	7	1	3
Purchasing Vehicle	1	1	1	3
House Expense	1	1	1	3
Purchasing Electricity Meter	11	9	-	-
Education	4	3	-	-
Purchasing Land	1	1	-	-

- While the proportion of respondents receiving financial training from SEWA Bank remains approximately 44%, representing a slight increase from 2005

(40% at that time), 77% of all respondents report that SEWA Bank services (including the PP account) have benefited them, in terms of enabling them to save money (32%), for example. Those who have taken loans report that SEWA Bank's interest is lower and/or that they appreciate being given access to credit.

Health

- The incidence of illness has been significantly reduced from 2005 to 2008. For example, 7% of respondents reported that they or someone in their household had suffered from ill-health or disease in the month prior to the survey, compared to the corresponding figure of 23% in 2005. Similarly, the incidence of illness during the previous 12 months had also been reduced from 23% in 2005 to 6% in 2008. Furthermore, the incidence of minor illness for the 13 month period before the survey had also been reduced from 28% in 2005 to 15% in 2008, and the incidence of major illness has been reduced by half from 8% in 2005 to 4% in 2008. This could indicate the beginnings of a trend towards better health for the residents of these communities. This interpretation is supported by the fact that 100% of respondents report that their health and that of their family has improved due to the provision of *SY2SP* facilities and services, many citing less disease in the area, increased cleanliness, and benefits connected with the provision of infrastructure such as gutter lines, as key drivers of health improvements.
- In both of the surveys, respondents were most likely to seek treatment in private hospitals. The reasons behind this include the perceptions that illnesses were cured immediately; they received good treatment; the hospital was near their homes; the family doctor was there; the medicine 'suits us'; the medicine from government hospitals was not as suitable (didn't work as well); poor treatment in government hospitals; there was no awareness about government hospitals, etc. Reasons for choosing public hospitals were: poor economic condition (poverty); the medicine 'suits us'; government hospitals are cheaper; they give good treatment; are near to home; etc.
- For the location of delivery (childbirth), the majority of respondents (63%) chose government hospitals in 2008, followed by private hospitals (31%) and home delivery (6%). The major reason for choosing the location of the last delivery prior to the survey as poor economic condition (poverty – 42%), followed by the idea that the government hospital was near their home and gave good treatment (23%). (Interestingly, this pattern is the reverse of the findings of the baseline report.) As in the baseline survey, the main reasons for choosing private hospitals is the perceived quality of

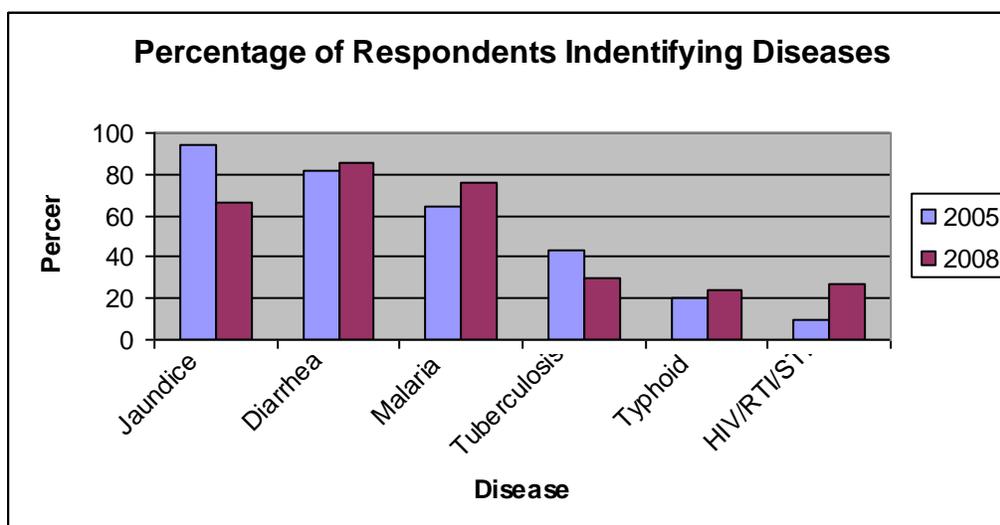
the treatment, while the primary reason for choosing government hospitals is because of their lower cost.

- 38% of respondents use the services of SEWA health workers (very much like the proportion at the time of the baseline), with purchase of medicines being the primary form of use (97%). The majority of these respondents (66%) reporting that this has benefited them because of the increased awareness regarding the appropriate use of medicine (i.e., the best way to take the medications) to fight against the disease most effectively. 20% of respondents report receiving training from SEWA health workers.

Health awareness

- As at the baseline, respondents were asked whether they are able to identify some common illnesses by their symptoms. Symptoms of diarrhoea, malaria and jaundice were widely recognized, while there were relatively low rates of awareness of the symptoms of tuberculosis (recognized by 43% of respondents), typhoid (20%) and HIV/RTI/STI (10%). These findings are similar to those of the baseline survey. However, as shown in Figure 7, the awareness of diseases such as malaria, diarrhoea, typhoid and HIV/RTI/STI had increased by the 2008 study; in contrast, the proportion of respondents aware about the symptoms of jaundice and tuberculosis was less in 2008 than in the 2005 study.

Figure 7: Knowledge of common illnesses by their symptoms, 2005 and 2008



Maternal and child health

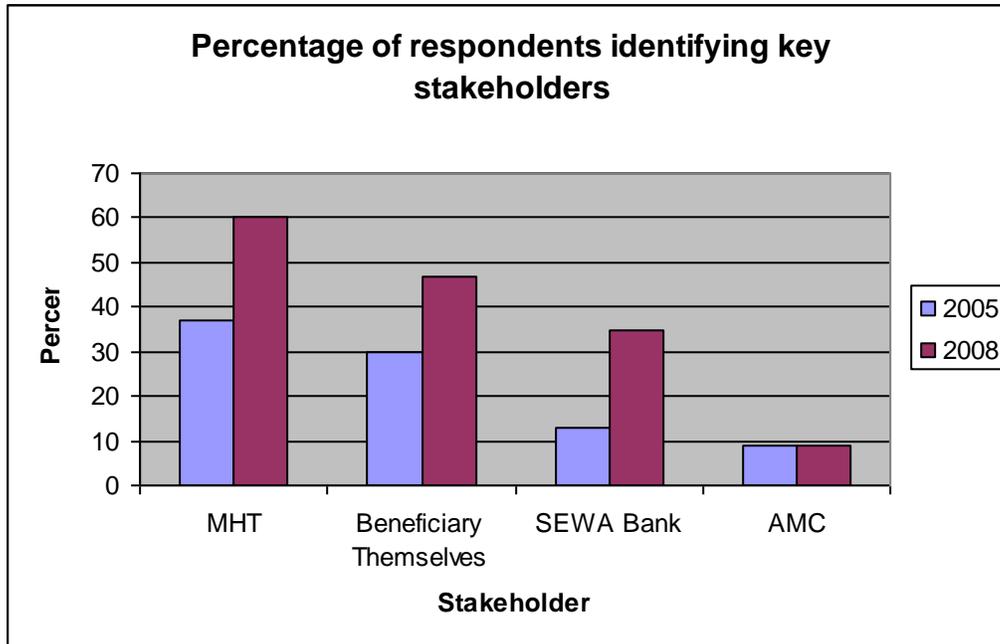
- The majority of respondents with children aged five and under in the house reported in 2008 that the expectant mother had received some form of antenatal medical care, with urine test/blood test (83%) and sonography (60%, versus 33% in the baseline) being the most frequently cited care received. However, only one-third of women received anti-tetanus vaccinations, which was the most common antenatal care in 2005 among women with a child aged five years or younger. Similarly, only 2% of women were getting regular health checkups and only 10% reported taking any supplements such as iron, as compared to 39% at the baseline. At the baseline stage, a minority of 6% of women reported that the mother received no treatment at all; this proportion has come down slightly to 4% in 2008.
- As in the baseline survey, the majority of respondents (73%) reported that they would take the expectant mother to the hospital in case of a risky pregnancy, while the remaining respondents (27%) said they didn't know what action to take (this proportion was almost the same, at 26%, in the baseline survey).

Programme awareness and participation

- The proportion of respondents who reported attending meetings regarding this programme has increased over the years: 81% of respondents said in 2008 that they had attended a meeting about the *SY2SP* programme, in comparison to only 52% in 2005. The respondents who attended at least one meeting were asked details about the number of meetings they had attended: 58% reported attending meetings five times or more, indicating a relatively high level of community engagement.
- About three-fourths (74%) of respondents in 2008 reported receiving training as part of the programme; this proportion was only 41% in 2005. As in the baseline study, the most frequently mentioned type of programme was Parivartan programme training (77%), followed by trainings regarding the cleanliness of house/awareness of health (12%), and saving-related trainings (11%).
- 93% of respondents who attended trainings under the programme said that these trainings had benefited them. The most commonly cited benefits mentioned include increased cleanliness in the house and surroundings (61%) and increased skills regarding the handling of construction materials (3%). Another frequently mentioned benefit of trainings was the financial reward received for attendance (36%).
- The percentage of respondents mentioning the AMC as one of the programme stakeholders came out exactly the same as in the baseline

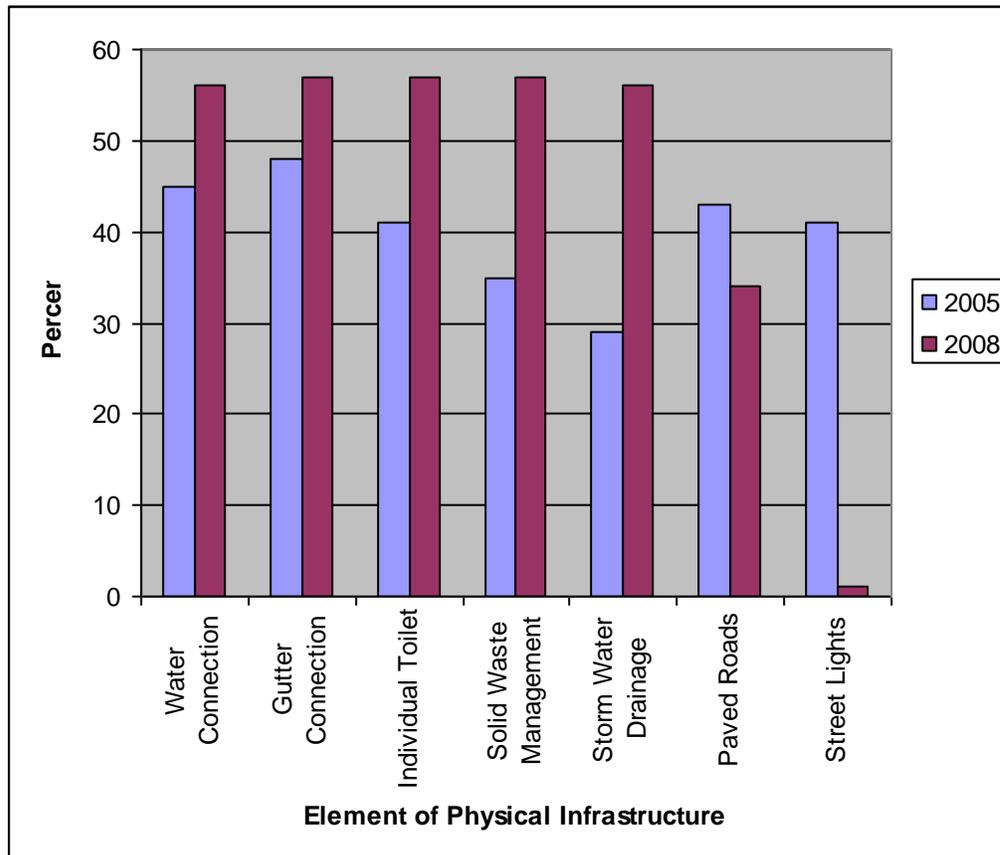
study (9%); however for other stakeholders, there was a significant increase in the proportion of respondents identifying these groups as stakeholders (see Figure 8). For example, the proportion of respondents identifying MHT, themselves (as beneficiaries), and SEWA Bank as key stakeholders rose from 37% to 60% (MHT), 30% to 47% (themselves), and 13% to 35% (SEWA Bank), respectively (Figure 8).

Figure 8: Respondents identifying key stakeholders, 2005 and 2008



- Interestingly, only 7% of respondents in 2008 reported that they are members of community groups. This is significantly less than the 18% who reported membership in the baseline report (all the groups specified are CBOs set up for the purpose of the programme), which may reflect the individual respondents selected for the endline study (e.g., the time of day usually interviewed). There also seems to be very low levels of awareness of other social or development schemes in addition to *SY2SP*. One-fourth of the respondents who said they were members of community groups did not identify the name of the group.
- Respondents were asked about the benefits they were to receive under the programme in both baseline and endline surveys. In the 2008 study there was a significant improvement, as compared to the baseline study, in terms of this knowledge – in particular identifying physical infrastructure as a benefit they received from this programme (Figure 9).

Figure 9: Knowledge of physical infrastructure as a benefit they will receive under SY2SP, 2005 and 2008.



- All (100%) of the respondents to the 2008 survey are members of SEWA, as compared to 51% in 2005. Out of 164, near about three-fourths (66%) became members 3-6 years prior to the survey and 28% reported membership of less than 3 years; the remaining 6% have been members for more than 6 years.
- Members were further asked whether they had made any changes to their house environment during the previous year, and 18% responded positively. The changes included: house lifted up (31%), colour work (17%), new tiles/cement work (14%), new rooms (10%), wall repairs (10%), and other responses. One respondent reported spending on average Rs. 22328 for these works. The source of money for these efforts was primarily from savings (62%), followed by borrowing (17%), relatives (17%), and loans (7%).
- 18% of respondents had contacted higher officials or elected representatives regarding basic amenities or with complaints, which is lower than the proportion (29%) reporting such interactions in 2005. Of those reporting such interactions in the endline study, 79% contacted officers in the municipality

while the remaining 21% contacted a Councillor. The vast majority of the respondents (86%) in 2008 reported that their complaints were attended to and slightly more than two-thirds (69%) were happy with the responses they received, which is higher than the 63% reported in 2005.

Conclusions and Recommendations

Based on an appreciation of the fact that integrated slum improvement can have a range of benefits both for individuals, communities and the wider economy and society, this report has focused on the *SY2SP* slum improvement programme in Ahmedabad, India. The report has presented key findings from a comparison of the baseline and endline surveys showing changes over the course of the three year period.

The report has found evidence of great improvements in physical infrastructure and, as a result, in the quality of life and well-being of respondents. In particular, women report a range of benefits from the new water and sanitation facilities and paved roads, including time-saving, improved hygiene and cleanliness, an end to the indignities and inconvenience of open defecation, and also improvements in health for themselves and their families. It does appear that reports of disease and ill-health are declining, which appears to be a significant achievement of the project, but more research is needed to establish this and its causal mechanisms empirically.

It is also likely that the provision of infrastructure will have improved the asset value of residents' homes. This should be the subject of further investigation, as should an assessment of whether such facilities encourage further investment by respondents in their houses, which is something that may become apparent over a longer period of time.

A comparison of baseline and endline surveys does not allow a direct assessment of the community development work of the programme partners due to the fact that this had already been ongoing for several years at the time of the baseline. However, there are many indications in both surveys of the positive impact this work has had, for example in the fact that almost half the respondents have savings accounts. Indeed, the very fact that the infrastructure has been provided and the work implemented seemingly with relatively few difficulties, indicates the success of MHT in motivating residents to join the *SY2SP* scheme in the first place, and in forming the CBOs. Without this community development component, the amenities would not have been provided in the first place, and this work is set to be a much longer process, continuing after the physical infrastructure work has been completed. Whether residents continue as members of the CBOs is also something that will be important to follow up (if so, why and if not, why not) to see what roles the CBOs and other organizations can play in sustaining and taking forward the achievements that have been made.

There is still work to be done to ensure that all households in the study areas have fully functioning facilities, and in following up complaints made by householders. The residents who contacted municipal officers or councillors appear to have been satisfied with the responses, but it will be important to see if this level of satisfaction continues. In addition, as noted above, some residents within the study areas (especially in Sadgurukrupanagar) were excluded from the programme because of

the location of their homes. The potential implications of this in terms of the possibility of these households ever being provided with basic amenities, and the implications for relations between neighbours, are unclear at present but should be investigated further.

There are also specific areas of work that need to be followed up in terms of community development. For example, in relation to maternal health relatively few women seem to be receiving supplements including iron when pregnant, and further work could be done to improve this situation. In addition, very few respondents reported an awareness of any other social or development schemes, so provision of information could clearly be improved.

Both the baseline and endline studies suggest that while approximately half of respondents have a savings account, the majority who had a savings account indicated an inability to save regularly, and half of all respondents were still without savings accounts. An important reason for this is likely to be the relatively low and irregular incomes in these areas, indicating a very fundamental need for help with income generation. Infrastructural improvement is critically important – particularly with respect to health, housing, and the immediate environment – and significant progress has certainly been made on all of these fronts. However, achieving sustainable livelihoods is the other key consideration if improvements are to be maintained over time.

Some respondents did report changes in their employment patterns and improvements in their incomes due to the provision of amenities, but this was uneven and again, this needs to be investigated further once more time has passed. As noted above, infrastructural changes can be made quickly, but overall economic and social change are more complex and take time. They are subject to many more external influences (e.g., the dynamics of the city, state and national economies, and the impact of overall economic and social change on informal work), and three years is a very short period of time in which to see systematic changes. Similarly, at this stage no systematic changes regarding school attendance or educational attainments can be verified apart from an apparent increasing in literacy rates, even though these are expected to be among the positive longer term outcomes of the programme. It will be important to follow up both livelihood and educational as well as other trends over time to assess the social and economic as well as infrastructural impact of this programme.

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[On the following pages, please find Annex 1: Endline Questionnaire. See also the baseline report for the original questionnaire and subsequent amendments.]

ANNEX 1 ENDLINE QUESTIONNAIRE

Partnering SY2SP: Documenting transformation in slums

Form No. : (Not to be filled by Surveyor)_____
Date of interview: <input type="text"/> / <input type="text"/> / <input type="text"/>
Time at start of interview (24 hr) <input type="text"/> : <input type="text"/>
Time at completion of interview (24hr) <input type="text"/> : <input type="text"/>
Name of the surveyor: _____
Name of the slum: _____
Full Address: _____
House Number : _____

HOUSEHOLD SURVEY CODE	1. Original household <input type="checkbox"/>	2. Substitute household <input type="checkbox"/>
REASON FOR SUBSTITUTION OF ORIGINAL HOUSEHOLD	1 Informant busy/away from home <input type="checkbox"/>	
	2 Informant non-co-operative/refused <input type="checkbox"/>	
	3 Other (specify)	

ENDLINE HOUSEHOLD SURVEY

A. PERSONAL DETAILS:

A.1 Full Name: _____

A.2 Caste:

- | | | | |
|--------------------|--------------------------|-------------------------|--------------------------|
| 1. Scheduled caste | <input type="checkbox"/> | 4. General Class | <input type="checkbox"/> |
| 2. Scheduled tribe | <input type="checkbox"/> | 5. Other, specify _____ | |
| 3. Backward Class | <input type="checkbox"/> | | |

A.3 Mother tongue:

1. Gujarati	<input type="checkbox"/>		
2. Hindi	<input type="checkbox"/>	3. Other (specify) _____	

A.4 Religion:

- | | | | |
|-----------|--------------------------|-------------------------|--------------------------|
| 1. Hindu | <input type="checkbox"/> | 4. Christian | <input type="checkbox"/> |
| 2. Muslim | <input type="checkbox"/> | 5. Other, specify _____ | |
| 3. Sikh | <input type="checkbox"/> | | |

B. HOUSEHOLD INFORMATION

B.1 Household Composition: [Complete the table for each person living in the house, starting with the respondent first]

1. Sr. No	2. Name	3. Age	4. Sex [code]	5. Relation with Respondent [code]	6. Marital Status [code]	7. Education [code]	8. Still Studying? [code]	9. Monthly income from sources other than paid work (rent, pension, scholarship etc)	10. Are you currently working/assisting with work? [code]
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									

Codes for B.1:

4. Sex	5 Relation with the respondents	6. Marital status	7. Education VII	8. Still studying?	10. Working/assisting with work
1. Male	1. Self	1. Married	0 illiterate	1. Yes	1. Yes
2. Female	2. Husband	2. Unmarried	K kindergarten	2. No	2. No
	3. Son/ Daughter	3. Divorcee	1- 12 Classes 1-12 [write actual class]		
	4. Mother/ Father	4. Widow/ Widower	13 Graduate		
	5. Parents in Law	5. Separated	14. Post graduate		
	6. Son/Daughter in Law		15. Technical Education (diploma course)		
	7. Brother/ Sister		16. Vocational training		
	8. Grandson/ Grand Daughter		17. Any Other		
	9. Niece/ Nephew		88. Don't know		
	10. Uncle/ Aunt		99. Below 3 years		
	11. Grand Parents				
	12. Brother in law/sister in law				
	12. Others				

[Complete table below for those members of the household currently working/assisting with work]

B.2 Details of employment [Starting with the respondent first (if applicable)]

1. Sr. No	2. Name	3.Type of work [code for 3 main types of work]	4.Details of work activities [write]	5. Number of working days in a month	6. Number of working months in a year	7.Place of work [code]	8.Income from work [Rs]		
							Daily	Monthly	Yearly
1		A.							
		B.							
		C.							
2		A.							
		B.							
		C.							
3		A.							
		B.							
		C.							
4		A.							
		B.							
		C.							
5		A.							
		B.							
		C.							

1.Type of Work	5.Place Of Work
1. Salaried	1. In own home
2. Daily Wage Labor	2. Away from home (eg in shop, factory, vending etc)
3. Self Employed	
4. Piece Rate Worker	
5. Apprentice	
6. Unpaid helper	
7.Other	

[Calculate total annual income of household _____ Rs

B.3 Any change in Income & Employment in your family due to seven facilities of Parivartan?

1. Yes 2. No

If yes then specify

If No then specify

B.4 Any change in your Mental peace and satisfaction due to Seven facilities of Parivartan ?

1. Yes 2. No

If yes then specify

If No then specify

B.5 Any change in Social status or relationship due to Seven facilities of Parivartan ?

1. Yes 2. No

If yes then specify

If No then specify

C. TYPE OF HOUSE

C.1 How long has your family resided in this house? _____years/ _____months

C.2 Who owns this dwelling?

1. Respondent

4. Landlord (pay rent)

2. Spouse

5. Other, specify_____

3. Family

C.3 Who owns the land on which the dwelling is built?

1. Respondent

4. Landlord (pay rent)

2. Spouse

5. AMC

3. Family

6. Other, specify_____

D. HOUSE AS A WORKPLACE

D.1 Is any part of your house also used as workplace? **[Surveyor check with table B2.7]**

1. Yes 2. No

[If Yes, proceed to D.2. If No go to section E]

D.2 Please give details:

Work activities [write what work engaged in at home]	Area of home used for work [code]

--	--

**Code for area of home used for work: 1. Inside the house
2. Outside house/ in courtyard/verandah**

D.3 How many hours per day do you work from home? _____ hours

D.4 Do you face any difficulties when you work at home?

1. Yes 2. No

If Yes, please specify

If No please specify

E. AMENITIES

Water Connection

E.1 What is your main source of water?

1. In-house connection 4. Tanker
 2. Public tap 5. Other, specify _____
 3. Public hand pump

[If in-house connection is specified, proceed to E2. Otherwise, go to E.4]

E.2 Amount spent on getting water connection:

Item	Amount (In Rs.)	Paid to whom? [code]
Principal Amount(connection charge)		
Monthly Charge		
Others		

Code for 'Paid to whom': 1 Municipality 2 Middleman 3 Local leader 4 Other

E.3 Are you satisfied with the water pressure?

1. Yes 2. No

[Go to E.11]

E.4 How long does it take to walk to the water source?

1. Under 10 minutes 2. 10 – 20 minutes 3. More than 20 minutes

E.5 Who collects the water for regular use?

Name	Age	Sex	No. of hours per trip	No. of trips per day

[Calculate total hours per day spent collecting water _____]

E.6 Do you have to spend any money to obtain water?

1. Yes 2. No

If Yes, how much? Rs. _____

E.7 Have you or anyone in your household faced any harassment or abuse when collecting water?

1. Yes 2. No

If Yes, please specify _____

If No, please specify _____

E.8 Have you been involved in any quarrels/litigation with other residents about water in the last year?

1. Yes 2. No

[If Yes, proceed to E9. If No, go to E11]

E.9 How frequently do these quarrels occur?

1. Everyday 3. Several times per month
 2. Several times per week 4. Once per month or less

E.10 Have these quarrels cost you any money in the last year (litigation costs etc)?

1. Yes 2. No

If Yes, how much? Rs _____

E.11 Do you filter the drinking water before storing it?

1. Yes 2. No

E.12 Is the supply of water regular?

1. Yes 2. No

E.13 At what time of day is the water available? **[multi-code]**

1. Morning 2. Daytime 3. Evening

E.14 How much time is the water available for in a day?

1. 30 minutes or less 4. 1½ - 2 hours
 2. 30 minutes - 1 hour 5. More than 2 hours

3. 1 - 1½ hours

E.15 Is this sufficient for your needs?

1. Yes 2. No

E.16 Whom do you complain to if there is a problem with the water supply?

E.17 Have you paid any charges in the last month to have the water supply fixed?

1. Yes 2. No

If Yes, then how much? Rs _____

E.18 Any change due to the water facilities availability at your house?

1. Yes 2. No

If yes then specify

If No then specify _____

E.19 If you are saving your time from collecting water how do you used your time?

E.20 If you are spending your saved time in economic activities then has your income increase?

1. Yes 2. No

If yes then specify

If No then specify _____

Bathroom

K.1. Where do you bathe? **[code]**

Men _____ Women _____ Boys (age 0-11) _____ Girls (age 0-11) _____

Code : 1. Open space inside the house
2. Open space outside the house
3. Community bathroom

4. Separate bathroom
5. Other, specify _____

K.2. Do you have to pay for your bathing facilities?

1. Yes 2. No

If Yes then how much / person ? _____Rs.

E.21 How many times do you bathe per week? _____times

Toilet

E.22 What toilet facilities do you use?

	Men		Women		Boys (age 0-11)		Girls (age 0-11)	
	Place [code]	Payment/ Person (Rs.)	Place [code]	Payment/ Person (Rs.)	Place [code]	Payment/ Person (Rs.)	Place [code]	Payment/ Person (Rs.)
Urinate								
Defecate								

Code for place:

1 In-house toilet connected to drain
2 In-house toilet connected to soak pit
3 Public toilet

4 Pay and use toilet
5 Open areas
6 Other (specify)

K.3 Do you have an individual toilet?

1. Yes 2. No

[If Yes, proceed to K.4. If No, go to K.5]

K.4. Is your toilet functioning properly?

1. Yes 2. No

If No, specify problems _____

[Go to K.6]

K.5 Do you face any problems due to the lack of an individual toilet?

1. Yes 2. No

If Yes, specify _____

K 5a. Any change due to Bathroom/ Toilet facilities ?

1. Yes 2. No

If yes then specify _____

If No then specify _____

Gutter

K.6 Do you have an individual gutter connection?

1. Yes 2. No

[If Yes, proceed to K.7. If No, go to K.8]

K.7 Is it functioning properly?

1. Yes 2. No

If No, specify problems _____

[Go to K.8a]

K.8 Do you face any difficulties due to the lack of an individual gutter connection?

1. Yes 2. No

If Yes, specify _____

K.8a Any change due to Gutter Facilities ?

1. Yes 2. No

If yes then specify

If No then specify

Storm water drainage

K.9 What happens to the water after rainfall? **[Multi-code]**

1. It collects in the area
2. The lanes get blocked
3. Your house floods
4. It drains away quickly (no water logging)
5. Any other, please specify _____

K.10 How much time does it take to clear the water after rainfall? _____ hours

K.10a Any Change due to Storm Water Drainage ? 1. Yes 2. No

If yes then specify

If No then specify

Solid Waste Collection

E.27 Are there any arrangements to clean the area?

1. Yes 2. No

E.28 Does someone come to collect the garbage from your area?

1. Yes 2. No

E.28a Any change due to Waste Collection?
If yes then specify

1. Yes 2. No

If No then specify

Roads

E.29 Are all the roads in your area paved?

1. Yes 2. No

[If Yes, go to E30a. If No, proceed to E.30]

E.30 Do you face any problems due to having unpaved lanes?

1. Yes 2. No

If Yes, please specify:

E.30a Any change due to Paved Roads ? 1. Yes 2. No
If yes then specify _____
If No then specify

Street Lighting

E.31 Are the streetlights in your area functioning properly?

1. Yes 2. No 3. No streetlights

E.32 Is the number of streetlights in your area sufficient?

1. Yes 2. No 3. No streetlights

[If Yes, go to section 33a. If No/no streetlights proceed to E33]

E.33 Do you face any problems due to the lack/ insufficient number of streetlights?

1. Yes 2. No **(go to F)**

If Yes, please give details:

Sr.No.	Problems faced by Men	Problems faced by Women
1		
2		
3		

E.33a. Any change due to Street lights in your Area? 1. Yes 2. No

If yes then specify

If No then specify

F. EXPENDITURE AND ASSETS

Expenditure

Kind of Expenditure	Amount in Rs.		
	Daily	Monthly	Yearly
Food			
Fuel			
Clothing			
Education (Uniform, Fees, Books etc.)			
Rent (House)			
House tax			
Electricity			
Medical Expenses			
Other Expenditure (e.g. transport, leisure)			

[Calculate total annual expenditure Rs. _____]

Assets

	Name of Assets	“YES” Have item (✓)	Number of items	Purchased how many years ago? 0 = gift
1.	Stove: kerosene			
2.	Stove: gas			
3.	Fan: ceiling or standing			
4.	Radio /Tape Recorder/DVD			
5.	TV			
6.	Telephone - Cell/ Landline			
7.	Refrigerator			
8.	Bicycle			
9.	Two Wheeler			
10.	Sewing Machine			
11.	Live stock : Cow/ Buffalo Sheep/ Goat / Poultry			
12.	Cart (lari) or Table			
13.	Water Tank			
14.	Other Land			
15.	Other (specify below)			
	1.			
	2.			
	3.			

G. LOANS AND SAVINGS

G.1 Are you member of SEWA bank?

1. Yes 2. No

G.2 Have you received financial training from SEWA Bank?

1. Yes 2. No

G.3 With which scheme of SEWA Bank are you connected?

- | | |
|---|---|
| 1. P.P. Account <input type="checkbox"/> | 7. Recurring <input type="checkbox"/> |
| 2. Saving <input type="checkbox"/> | 8. Riddhi-Siddhi Recurring Program <input type="checkbox"/> |
| 3. Future Security Program <input type="checkbox"/> | 9. Kishori Gold <input type="checkbox"/> |
| 4. Housing Fund Program <input type="checkbox"/> | 10. Swapna Siddhi <input type="checkbox"/> |
| 5. Worry elimination program <input type="checkbox"/> | 11. Sathi <input type="checkbox"/> |
| 6. Jivan Asha <input type="checkbox"/> | 12. Aagewan <input type="checkbox"/> |

G.4 Do you have a savings account?

1. Yes 2. No

[If Yes, write details of each account separately in the table below]

1. Sr.No.	2. Where is the account held? (Bank Name)	3. When was the account opened? [specify year if possible]	4. Do you deposit money in your account every month? [code]
1.			
2.			
3.			

Code for 4: 1. Yes, regular saver
2. No, not a regular saver

G.5 Have you taken out a loan (borrowed money) in the last three years?

1. Yes 2. No

[If Yes, provide details of each loan separately in the table below, starting with the most recent loan first]

Sr. No.	Creditor [code]	Loan period [write dates dd/mm/yy]	Loan Amount [in Rs.]	Purpose of loan [code]	Monthly Installment [in Rs]	Rate of interest [%]	Specify - Interest per month/ per year?

		From	To					
1								
2								
3								
4								
5								

Codes for Creditor	Codes for Purpose of loan
1. Sewa Bank 2. Grocery merchants 3. Money lenders 4. Employer/middleman 5. Friends 6. Relatives 7. Other	1. Equipment/ materials for work/business 2. Home maintenance/upgrading 3. Medical expenses 4. Purchasing large household items 5. Special events (religious and social) 6. Education 7. Food 8. Other

(If respondent has received training from SEWA Bank, or has any kind of SEWA Bank account/taken a SEWA Bank loan, ask the following):

G.6 Have these SEWA Bank services benefited you in any way?

1. Yes 2. No

If YES, how?_

H. HEALTH

H.1 What kinds of illness have you and your family faced in the last month?

1. Sr. No.	2. Name	3. Age	4. Type of illness [code]	5. Period of ailment [write number of days]	6. Treatment [code]	7. Reason for choosing treatment	8. Cost of treatment [in Rs.]		
							Medical	Transport	Wage loss
1									
2									
3									
4									
5									
6									

Code for 4. (Type of illness)	Code for 6. (Treatment)
1. 'White discharge' (RTI/STI) 2. TB 3. Malaria 4. Diarrhoea 5. Typhoid 6. Jaundice 7. Cholera 8. Fever 9. Cough/Cold 10. Skin disease 11. Other	1. Private Hospital 2. Public Hospital 3. Trust Hospital 4. Health worker 5. Other

H.2 What kinds of illness have you and your family faced in the last year?

1. Sr. No.	2. Name	3. Age	4. Type of illness [code]	5. Period of ailment [write number of days]	6. Treatment [code]	7. Reason for choosing treatment	8. Cost of treatment		
							Medical	Transport	Wage loss
1									
2									
3									
4									
5									

Code for 4. (Type of illness)	Code for 6. (Treatment)
1. 'White discharge' (RTI/STI) 2. TB 3. Malaria 4. Diarrhoea 5. Typhoid 6. Jaundice 7. Cholera 8. Fever 9. Cough/Cold 10. Skin disease 11. Other	1. Private Hospital 2. Public Hospital 3. Trust Hospital 4. Health worker 5. Other

[Ask questions H3-H7, if any children age 0- 5 years in household. If no children in household, go to H8]

H.3 How many children aged 0-5 years in the household are immunized? _____ out of _____

H.4 Where did the last delivery take place?

1. Government hospital 3. Home
2. Private hospital 4. Other, specify _____

H.5 Why was this place chosen for the birth ?

H.6 What antenatal care was given?

H.7 What action would you take in case of a risky pregnancy?

H.8 Can you identify the following common diseases by their symptoms? **[Tick if Yes]**

1. Malaria 4. HIV/RTI/STI
2. Diarrhea 5. Jaundice
3. Tuberculosis 6. Typhoid

H.9 Have you ever utilised the services of a SEWA health worker?

1. Yes 2. No

If Yes:

H.10 Which services have you used? **[multicode]**

1. Medicines
2. Attending government hospital on advice of healthworker
3. Other, specify _____

H.11 Have you received any health training from SEWA?

1. Yes 2. No

H.12 Have the health services provided by SEWA (including trainings, health worker services/medicines) benefited you in any way?

1. Yes 2. No 3. Don't use any trainings/services

If Yes, how? _____

H.13 Any change of health of your family due to seven facilities of Parivartan ?

- 1. Yes 2. No**

If yes then specify

If No then specify

I. CITIZENSHIP AND GOVERNANCE

Parivartan Programme Awareness

I.1 Who are the various stake holders in the Parivartan (gutter-paani) programme? **[Tick those mentioned]**

- 1.AMC 2.SEWA Housing 3. SEWA Bank 4.The beneficiary herself

I.2 Who is the representative from your area for the Parivartan programme?

I.3 What benefits have you received under the programme?

I.4 Have you ever attended a meeting about the initiative?

1. Yes 2. No

If Yes,

How many times?_____ Where ?_____

I.5 Have you had any training under the programme?

1. Yes 2. No

If Yes, what type?_____

[If 'yes' to I.4 or I.5, then ask:]

I.5a Have these meetings or trainings benefited you in any way?

1. Yes 2. No

If Yes, how?_____

Awareness of Social Development Schemes

I.6 Are you aware of any other social or development schemes in your area or in other areas?

1. Yes 2. No

If Yes, state:

1. Sr.No.	2. Name of scheme	3. Benefits [write]	4. Carried out by [code]	5. Have you tried to access the benefits? [code]

Codes for 4: 1. Municipality (AMC) 2. State Government 3. NGO 4. Cooperative 5. CBO 6. Other
Codes for 5: 1. Yes 2. No

Interaction with Govt. Officers & CBO

I.7 Have you contacted higher officials or elected representatives regarding basic amenities or complaints (for example concerning water/electricity supply, garbage disposal)?

1. Yes 2. No

[If yes proceed to I.8. If No the go to I.11]

I.8 Who did you contact?

1. Officer in Municipality
 2. MLA (Member of Legislative Assembly)
 3. Councilor
 4. Other, specify _____

I.9 Was your complaint attended to?

1. Yes 2. No

I.10 Were you satisfied with the response?

1. Yes 2. No

I.11 Are you or anyone else in the family a member of any community group (e.g. CBO, union etc) ?

1. Yes 2. No

[If Yes, proceed to I12. If No, go to Section J].

I.12 Which group are you a member of? _____

I.13 What is the nature of your participation?

J. MEMBERSHIP

J.1 Are you a member of SEWA?

1. Yes 2. No

[If Yes proceed to J.2, If No finish the questionnaire]

J.2 How long have you been a member for? _____ years

J.3 Which of the activities of SEWA you are involved with?

[Tick all relevant options and give details where required]

- a. Insurance: Annual: Alone /whole family
 Life time: Alone / whole family
 Any other, specify _____
- b. Child care (if there is no child between 0-6 yrs then write 99)
- c. Co-operative
- d. Literacy
- e. Training
Specify type of training _____
- f. Legal advice

Finish questionnaire. Now complete house observation sheet.

Observation Sheet [Complete after observation. Before entering house explain that you need to record information about the house and ask the respondent's permission]

Observation of House		
1 MATERIAL OF THE EXTERNAL WALLS	1. Bricks & cement 2. Concrete 3. Mud and brick 4. Mud 5. Tin/metal/asbestos sheets 6. Canvas/felt/plastic 7. Other, specify _____	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
2 MATERIAL OF THE ROOF	1. Concrete 2. Roofing tiles 3. Galvanised iron/asbestos sheets 4. Canvas/felt/plastic 5. Other, specify _____	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
3 NUMBER OF ROOMS [write number]	_____rooms	

- In last two years you have done any changes in your house_1. Yes 2. No
 IF yes then which type of changes ?
 - House lifted up 2) New rooms 3) Walls repair 4) Door and Windows 5) new tiles/ Cement in house 6) house roofing 7) Other specify -----
- i. How much expense ----- (in rupees)
- ii. From where you have get money ?
 - 1) Savings 2) Loan 3) borrow 4) relatives 5) Other specify -----