

KCCI / 2008 - 09

Promoting Safe Deliveries Among Below Poverty Line Women: The process of social inclusion in Gujarat

Krishna Mohan Rao Adiraju Melissa Famula Tharshini Thangavelu Amy Whiffen

In collaboration with SEWA Rural Jhagadia, Gujarat





Disclaimer

The view expressed in this case study are those of the authors alone and do not reflect the views or policies of UNICEF or SEWA Rural, Jhagadia, Gujarat.

Design & Printing: Rajdhani Art Press | 98102 45301

Contents

List of Tables and Figures	2
Acknowledgements	3
Acronyms & Glossary	4
Foreword	5
Executive Summary	6
Introduction	8
Case Study	9
Methodology	9
Background	11
Maternal Health in India	12
Governmental Approaches	13
SEWA Rural's Approach	15
Findings	17
Quantitative	17
Data	17
Maternal Mortality Ratio	17
Antenatal Care	18
Institutional Delivery Rate	19
Government JSY and CY Schemes	20
Institutional Deliveries by Tribal and Non-tribal Women	21
Institutional Deliveries by Socio-economic Factors	22
Qualitative Data	24
Case Study 1	25
Case Study 2	27
Case Study 3	29
PHC and Institutional Views	31
Conclusion	34
Lessons Learned	34
Recommendations for Stakeholders	36
Government	36
Institutions	36
Villages	37
References	39
Annexures	41

List of Tables and Figures

Tables		
Table 1: N	Maternal Health Indicators for Country, State, and Block	12
Table 2: (Outline of Central and State Government Schemes	14
Table 3: N	Number of CY and JSY Beneficiaries at SEWA Rural Hospital	21
Figures		
Figure 1:	Causal Pathway of Case Study	8
Figure 2:	SEWA Rural Maternal Health Organizational Hierarchy	15
Figure 3:	Maternal Mortality Ratio in Project Area, 2003–2008	18
Figure 4:	Percentage Change in Home and Institutional Births in Project Area,	19
	2003–2008	
Figure 5:	Institutional Deliveries in Project Area and Control Area	20
Figure 6:	Percentage Change in Institutional Deliveries among Non-tribal and Tribal	21
	Women in Project Area	
Figure 7:	Institutional Delivery by Housing Type in Project Area	22
Figure 8:	Institutional Delivery by Mother's Education Level in Project Area	23
Figure 9:	Process of Obtaining JSY and CY Benefits	32

Acknowledgements

We would like to express our sincere gratitude to UNICEF India for granting us the opportunity to participate in this research project. Ms Amrita Singh and Ms Sumaira Chowdhury of the Country Office, and Dr Narayan Gaonkar of the UNICEF State Office in Gandhinagar, Gujarat, guided and assisted us. We would not have been able to complete this project without their help.

Our case study was completed on the campus of SEWA Rural, in Jhagadia. Our deepest thanks go to our supervisors, Dr Pankaj Shah and Dr Dhiren Modi, for their patience in guiding and teaching us and for organizing our field visits. Thanks and praise must be given to our Gujarati translators, Kinjal Sikligar and Jaysingh Shivaji Gamit, for their tireless efforts in survey-taking and translation. They were essential to our attempts to gain information from the local tribal women. Thanks also to Shailesh Parmar of SEWA Rural's Community Health Project for sharing data with us and for answering our questions. We are also extremely grateful for the kindness and warmth extended by the families and employees of SEWA Rural.

We express our sincere gratitude to Dr Vikas Desai, Additional Director, Health and Family Welfare, Commissioner's Office, Government of Gujarat, who took time to explain the future endeavours being planned for the Gujarat health care system. We thank Dr Ritesh Bhrambhatt, Medical Officer (MO) of the Moryana Primary Health Centre (PHC) for providing additional information on the government schemes and the role of the PHC in those schemes. We also thank Dr Pragnesh Gor, Manager, H. M. Patel Centre for Medical Care and Education, Karamsad for giving us his time and offering explanations.

We are very thankful to all the women we interviewed in the villages of Gujarat, who patiently answered our questions and shared their views and experiences with us. We are also grateful to the arogya sakhis, link workers, traditional birth attendants (TBAs), and auxiliary nurse midwives (ANMs) who helped us in locating these interviewees and for their hospitality during our fieldwork.

Last but not the least, we thank our parents, families, and friends—both old and new—who encouraged and supported us through this project from day one.

¹ SEWA Rural stands for the Society for Education, Welfare, and Action–Rural.

Acronyms & Glossary

ANC Antenatal Care

ANM Auxiliary Nurse Midwife

ASHA Accredited Social Health Activist

BPL Below Poverty Line

CHP Community Health Project

CY Chiranjeevi Yojana

EmOC Emergency Obstetric Care

FRU First Referral UnitGOI Government of IndiaJSY Janani Suraksha Yojana

MDG Millennium Development Goal

MMR Maternal Mortality Ratio

MO Medical Officer

NRHM National Rural Health Mission

PHC Primary Health Centre

PNC Post-natal Care

PPP Public Private PartnershipSBA Skilled Birth Attendant

SC Scheduled CasteST Scheduled Tribe

TBA Traditional Birth Attendant

UNICEF United Nations Children's Fund

Foreword

The Knowledge Community on Children in India is a partnership between the Government of India and UNICEF which aims to fill knowledge gaps and to promote information-sharing on policies and programmes related to children in India. In 2008, under the aegis of this initiative, 82 graduate students from India and across the world visited and documented projects focused on child rights and development. Their vibrant perspectives, commitment, and hard work are reflected in this series of case studies, which are published by UNICEF.

The case studies cover key sectors linked to children and development and address important policy issues concerning children in India. These include: primary education, reproductive and child health, water and sanitation, child development and nutrition, social exclusion and village planning. Based on desk research and field work, these case studies tell the story of innovations in service delivery, what works, why and under what conditions, and put a human face to the successes and challenges of development in India.

UNICEF recognises the potential and power of young people as drivers of change and future leadership across the globe. As such, the KCCI Summer Internship Programme also aims to develop a cadre of young research and development professionals with an interest, commitment and skills relating to the promotion and protection of child rights. UNICEF hopes to continue this collaboration with young researchers, the Government of India, and various research partners, so as to bring fresh perspectives and energy to development research and our ongoing efforts towards the fulfilment of the rights of children and women in India.

Karin Hulshof

Representative

UNICEF India

Executive Summary

In India, a maternal death occurs every seven minutes, leading to more than 77,000 Indian women dying each year.² Many of these maternal deaths are preventable when complications are identified in time and proper care is received. In an effort to reduce India's high maternal mortality ratio (MMR), various programmes and schemes are being implemented to increase the number of institutional deliveries.

Socially excluded women are particularly vulnerable to poor maternal health outcomes because of their limited access to health care services, scarce resources, and lack of awareness. Specific steps need to be taken to include these socially excluded women in order to reach them and to provide them with institutional care.

The objective of this case study is to examine the process of social inclusion in promoting institutional births among below poverty line (BPL) women, by specifically noting:

- how the schemes are received by the intended beneficiaries (BPL women)
- how different stakeholders contribute to efforts aimed at reaching the intended beneficiaries
- how challenges in implementing these schemes are addressed

To achieve the objective of the case study, extensive background research and analyses of quantitative and qualitative data were undertaken. The quantitative data were provided by the host institution and the qualitative data were collected through field interviews. Interviews were held with 35 randomly selected women who had recently delivered in villages in and around the Jhagadia area, in Gujarat. In addition, two interviews were conducted with employees of health institutions in Jhagadia.

From our quantitative analysis, it was found that Jhagadia has experienced an increasing trend in institutional deliveries. Within the SEWA Rural project area, socially excluded groups of tribal and BPL women have half the institutional delivery percentage of non-tribal women. Although the disparity exists, trends indicate that the recent yearly rate of increase in institutional deliveries among disadvantaged groups is growing faster than among non-disadvantaged groups. The quantitative analysis indicates that more excluded women delivering in institutions are availing the benefits of government schemes.

² From UNICEF India, country website 'Safe Motherhood Day 2008' < http://www.unicef.org/india/health_4223.htm Accessed on 31 July 2008.

The qualitative interviews provided an in-depth look at the process of institutional births from the perspectives of the excluded women in the Jhagadia area. A few eligible women were observed receiving the government benefits targeted at BPL women. Three stories of tribal BPL women and the barriers they faced in seeking care, reaching care, and receiving care are presented here. Interviews with institutional employees and fieldworkers demonstrated that a weak referral system and a disconnect between the village culture and the institution are key constraints preventing tribal BPL women from reaching institutions. Among those pregnant BPL women who reached the institution, lack of awareness and preparedness were the major obstacles in benefit distribution.

Based on the findings of this case study, we have identified the key lessons learned. To create a more socially inclusive process for promoting institutional births, barriers need to be addressed by taking the following steps: increasing awareness of the importance of institutional delivery and the benefits offered under various government schemes; reaching pregnant women during the antenatal period to facilitate preparedness; strengthening the referral network linking village women to institutions; improving the distribution of government schemes at all levels; and increasing the supply of facilities and doctors.

Institutions, both governmental and non-governmental, should focus on fulfilling their responsibility of providing quality health care and education, as well as on increasing their presence in village communities. At the village level, community health workers must bridge the gap between the institution and the villagers by offering counsel and assistance in obtaining needed care.

With universal and coordinated efforts at every step of the process, the promotion of institutional births can become more inclusive and can result in the prevention of maternal deaths among BPL and tribal women.

Introduction

In India, the proportion of institutional deliveries is low (less than 41 per cent as per the National Family Health Survey III [NFHS-III]). Every seven minutes a maternal death occurs, leading to more than 77,000 Indian women dying each year.³ Most maternal deaths can be prevented if deliveries are attended by Skilled Birth Attendant (SBA) and proper Antenatal Care (ANC) and Post-natal Care (PNC) is received. Furthermore, institutional deliveries are encouraged for women with potential complications since home deliveries lack the type of emergency obstetric care (EmOC) that trained health professionals in an institution can provide. As part of an effort to reduce the nation's MMR, the Government of India (GOI) has developed programmes **promoting safe and healthy deliveries** for pregnant women.

In general, women belonging to socially excluded groups such as BPL,⁴ Scheduled Tribes (STs), and Scheduled Castes (SCs) have the highest MMR because of limited resources and lack of access.⁵ Since socially excluded women are particularly susceptible to poor maternal health, additional efforts must be made by the government to reach these women. Targeted efforts are being made at both the national and state levels. This case study will analyse these efforts aimed at promoting institutional births especially among socially excluded women in Gujarat, India.

Figure 1 depicts how the status of socially excluded women has a negative effect by both decreasing the rate of deliveries attended by SBA and by increasing MMR. Interventions that effectively reach these women and increase their SBA rate might lead to a decrease in MMR.

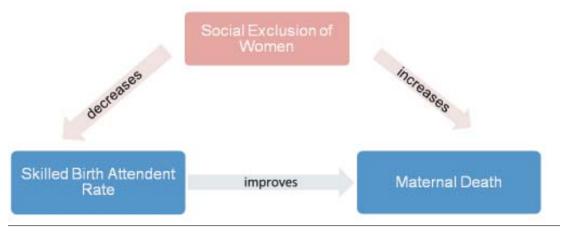


Figure 1: Causal Pathway of Case Study

³ UNICEF India, country website 'Safe Motherhood Day 2008' < http://www.unicef.org/india/health_4223.htm Accessed on 31 July 2008.

⁴ BPL is defined as a family having an annual income of Rs. 11,000 or less. *Socio-economic Review, Gujarat State*, 2005–2006.

⁵ N. Kabeer, Social Exclusion and the MDGs: The Challenge of 'Durable Inequalities' in the Asian Context, 2006.

Case study

This case study was conducted to examine how institutional delivery is promoted among BPL women. The team was hosted by SEWA Rural, a non-profit voluntary development organization based in Jhagadia, Gujarat. Jhagadia block is located in the Bharuch district of Gujarat (see Appendix 2). SEWA Rural works for the overall development of rural, poor, and tribal communities, providing health care, education, vocational training, and programmes for women's empowerment. The study seeks to understand the approach of the government towards this development and the various schemes for promoting safe delivery specifically among socially excluded groups through organizations such as SEWA Rural.

The objective of this case study is to examine the role of social inclusion in promoting safe births among BPL women by observing:

- how the schemes are received by the intended beneficiaries (BPL women)
- how different stakeholders contribute to efforts aimed at reaching the intended beneficiaries
- how the challenges faced in implementing these schemes can be addressed

Methodology

To achieve the objectives of the case study, both quantitative and qualitative data were used. The quantitative data were provided by SEWA Rural, based on its ongoing service delivery programmes. The data set included information on all women who delivered in the SEWA Rural project area from 2001 to 2008. The data were used to examine trends over the years on different outcome variables, including MMR and delivery location. Time trends will demonstrate if the interventions implemented by SEWA Rural and the government have had an effect on the maternal health indicators of excluded women.

The qualitative data were collected over nine days of fieldwork, in which 35 interviews were conducted with a random sample of village women who had given birth between 15 April and 15 May 2008, either at an institution or at home. Interviews were conducted with the help of a translator in the homes of the village women. A total of 27 interviews with randomly selected women in 24 villages within the SEWA Rural project area, and eight interviews in four different control villages outside the project area, were conducted. See Appendix 1 for the list of interviewees and villages.

The control villages are in Valia, Dediapada, and Rajpipla blocks. They were selected to match the SEWA Rural villages on similar geographic and demographic characteristics, but without the SEWA Rural intervention. The interview data were used to learn more about the experiences of village women during their pregnancy and delivery. From their accounts, key factors that affected,

either positively or negatively, the inclusion of BPL Women in accessing maternal health services were identified.

As a general disclaimer, variation in translation from Gujarati into English prevents our surveys from capturing the exact meaning of each interviewee's report. Furthermore, the interview sample restricts the ability to generalize findings across the entire state of Gujarat. The sample specifically represents the perspective of the BPL and socially excluded families in the Jhagadia area, and is therefore not representative of the entire Gujarat population. Finally, qualitative comparisons between the SEWA Rural project area and the control area are restricted by the limited interviews held outside the SEWA Rural project area.

Background

In UNICEF's 2008–2012 Country Programme, **social inclusion** is described as one of the central pillars in programmes for achieving national improvement, with an overall objective "to advance the fulfilment of the rights of all women and children in India to survival, development, participation and protection by reducing social inequalities based on gender, caste, ethnicity or religion".⁶

For this research project, we have adopted the working definition of social exclusion given by UNICEF, which is as follows:

Social exclusion is formed by the social processes through which groups of people are denied rights to participate fully in their societies, leading to material and other forms of deprivation.⁷

People can be excluded on the basis of their social identity or other differentiating factors. Exclusion limits societal involvement, which can affect access to social resources, including health care. The focus of this case study is on the economic exclusion of BPL women, but this will be identified in conjunction with other groups such as tribal and rural communities who encounter further social exclusion.

STs consist of the indigenous peoples of India who are regarded as separate from Hindu caste society. Recent projections estimate that by the year 2015, India's poverty ratio among STs will be 41.25, compared with the poverty ratio of 14.18 among non-excluded groups. Our study area of Jhagadia block in Gujarat has a population of 161,147, of which 67.5 per cent are ST. Widespread poverty and limited resources among ST and BPL families illustrate the need to extend comprehensive access to maternal health services and SBA for women belonging to these groups.

As a result of social exclusion, BPL and ST women are more vulnerable to poor health outcomes because they do not have the same access to services and resources as the women belonging to other, more privileged groups. Hence, efforts are being made to extend services to reach BPL

⁶ UNICEF 2008–2012 India Country Programme.

⁷ UNICEF 2008–2012 India Country Programme.

⁸ Overcoming Exclusion in Achieving the MDGs: Scheduled Tribes in India.

⁹ Overcoming Exclusion in Achieving the MDGs: Scheduled Tribes in India.

^{10 2003} in-service data of CHP, SEWA Rural.

and ST women in order to decrease the health disparity between excluded and non-excluded groups.

Maternal Health in India

India's maternal health indicators illustrate the need to strengthen the maternal health care system. The UN's Millennium Development Goals (MDGs) have set the maternal health target as reducing MMR by three-quarters between 1990 and 2015. Table 1 shows that Gujarat has performed better than the whole of India in maternal health care indicators, but it is yet to achieve the MDGs. Furthermore, Jhagadia block, which has a greater rural/minority population, is performing worse than the country as a whole in these indicators. The poor maternal health outcomes in Jhagadia are directly related to the situation of its disadvantaged population.

Table 1: Maternal Health Indicators for Country, State, and Block

Indicator	Definition	Goals	India	Gujarat	SEWA
		(2015)			Rural,
					Jhagadia
Maternal Mortality	No. of maternal deaths/	< 100	301	172	360
Ratio (MMR)	100,000 live births				
Births Attended by	No. of births attended by SBA/	100	48.2	64.7	33.7
Skilled Attendant (%)	no. of total deliveries				
Institutional Births	No. of deliveries at institution/	80	40.7	54.6	29.5
(%)12	no. of total deliveries				

Goals (2015) from 'Millennium Development Goals, India Country Report, 2005'. India and Gujarat MMR from SRS, 2001–2003; % from NFHS-III, 2005–2006. Jhagadia numbers from SEWA Rural In-service data set, 2005–2006.

The high MMR in India is associated with factors such as insufficient public health networks, poor hospital facilities, shortage of doctors, and cultural traditions. BPL women in rural areas are particularly vulnerable to such deficiencies because they lack the economic resources to overcome these problems.

In overcoming the obstacles to proper maternal care and in preventing maternal death, time should be considered the key factor. Complications can be managed and resolved more effectively

¹¹ Millennium Development Goals, India Country Report, 2005.

¹² Institutions include Sub Centres, PHCs, CHCs, and FRUs. Not all of these institutions have the capacity to provide EmOC.

and efficiently the sooner they are identified. The **three delay model** categorizes the different barriers that prevent women from getting the necessary care in a timely manner:¹³

- **Delay in deciding to seek care:** At the individual and family levels, many factors affect the decision about a woman's delivery location: social and cultural pressures, lack of funds to pay for care, ignorance, and perceived discrimination.
- **Delay in reaching care:** At the community level, a functional system of communication and transportation must be available to the women once they decide to go to the institution for delivery.
- **Delay in receiving care:** At the system level, the government is responsible for providing all communities with quality facilities and trained personnel who can provide effective maternal care, especially in emergencies.

In order for an intervention to be comprehensive, it must address delays at each level or stage of this process. These delays are greater barriers in impoverished remote areas where the performance of the public health system and the referral system is at its weakest. In addressing these obstacles and in building a more socially inclusive maternal health system, the key stakeholders are government officials, health institutions, officials responsible for public infrastructure, health professionals, and village workers.

Governmental Approaches

In 2003, GOI implemented the Janani Suraksha Yojana (JSY) scheme. The objectives of JSY are to reduce the overall MMR and to increase institutional deliveries among BPL families. JSY provides cash assistance to eligible BPL pregnant women. Resources are distributed to the state governments, with additional support given to the 10 lowest-performing states based on the state institutional delivery rate. Gujarat is considered a high-performing state.

Under this scheme, the local health worker, such as the Accredited Social Health Activist (ASHA)¹⁴ or the ANM,¹⁵ identifies and registers eligible women for JSY. The pregnant woman is then registered with the PHC, thereby linking her to the institution where she will receive the cash assistance of Rs. 500 in Gujarat. ASHAs are expected to assist pregnant women in receiving ANC, escorting them to health centres for delivery, and providing them with post-natal counsel. Pregnant women must submit a copy of their BPL cards and JSY forms in order to receive the benefits.

¹³ D. Barnes-Josiah, D., C. Myntti, and A. Augustin (1998): The "Three Delays" as a framework for examining maternal mortality in Haiti. *Social Science and Medicine*, 46: 981–93.

¹⁴ The ASHA programme was started in 2007. ASHAs are trained and employed by GOI as part of the National Rural Health Mission (NRHM). They are recruited and trained in many parts of India.

¹⁵ ANMs are government employees at the Sub Centres. They are trained to conduct normal deliveries and to identify complications.

In addition to JSY, the Government of Gujarat has developed its own scheme called the Chiranjeevi Yojana (CY). CY is a public private partnership (PPP) designed to address the shortage of public maternal health care providers in underserved areas by contracting pre-existing non-governmental private practitioners. The objective of the scheme is to increase access to skilled birth attendants (SBAs) and EmOC by poor and excluded women. The CY programme offers coverage to BPL families for institutional care and also gives a transportation stipend. It also provides financial support to the health worker who accompanies the pregnant woman to the institution.

CY, which involves more private practitioners, increases the supply of free care for BPL women. The government identifies private institutions that fulfil the required criteria for being contracted to CY, which are then provided capitation compensation of 4,000 US dollars for 100 deliveries (including treatment of complications). Currently, CY has contracted more than 850 obstetricians in Gujarat who are able to provide free EmOC¹⁶ to BPL and poor mothers. See Appendix 5 for the state-wide outcomes of the CY scheme. By increasing free access to maternal care in underserved areas, CY can increase the number of institutional deliveries among BPL women.

Table 2: Outline of Central and State Government Schemes

	JSY (Central)	CY (State)
Eligibility		
Age	19 years and older	No age restriction
Status	BPL	BPL
Restrictions	Up to 2 live births	Coverage only in facilities contracted by the state ¹⁷
Benefits		
Cash assistance	Rs. 500	Rs. 0
Transportation	Rs. 200	Rs. 200
Cash for attendants	Nil	Rs. 50
Institutional coverage	No additional coverage beyond public institutions	Free hospital care ¹⁸
For cesarean births	Rs. 1,500	Free for beneficiary
Distribution		
When benefits are received	After submitting paperwork/ upon hospital discharge	At the time of delivery, money is distributed at discharge
Focal point/person	ANM or Field Health Worker	Contracted hospital

Source: Janani Suraksha Yojana: Guidelines for Implementation and Maternal Health Financing: Issues and Options: A Study of the Chiranjeevi Yojana in Gujarat.

¹⁶ A. Singh, D. Mavalankar, A. Desai, S. R. Patel, and P. Shah (2008): *Human Resources for Comprehensive EmOC:* An innovative partnership with the private sector to provide delivery care to the poor.

¹⁷ An amendment was passed recently to include PHCs and public hospitals in CY so that women get the transportation money and the attendant money in addition to the free care already provided.

¹⁸ This includes cost of medicines, blood work, lab tests, hospital fees, and any operative costs.

SEWA Rural's Approach

SEWA Rural was granted the status of a First Referral Unit (FRU) by the Government of Gujarat and UNICEF under the state PPP initiative. As an FRU, SEWA Rural is responsible for providing emergency delivery and newborn care to the entire Jhagadia block. In 2003, almost four out of five mothers in Jhagadia preferred home delivery because of various socio-economic, cultural, and accessibility factors. Many of these home deliveries occurred without the assistance of an SBA or access to EmOC. The lack of SBA contributed to higher mortality and morbidity among mothers and newborns in Jhagadia block. In response to this problem, SEWA Rural initiated the Community Health Project (CHP) in 2003, aimed at promoting safe motherhood and newborn care through a network of trained village health volunteers, who provide counsel and other services at the doorstep.

SEWA Rural calls its village health volunteers arogya sakhis, which means 'health friend' in Gujarati. These women are selected and trained by SEWA Rural. Arogya sakhis visit pregnant women in their homes to provide maternal health education, ANC, and post-natal care (PNC). In an ideal patient–arogya sakhi relationship, the identification and registration of a pregnant woman is done as early as possible during the first trimester. From the time of registration, the arogya sakhi visits the pregnant woman regularly, making a total of 12 visits. When the arogya sakhi is not delivering babies, she imparts medical knowledge to women about safe birthing practices and links them to the institution. For her work, she receives a monthly honorarium of approximately Rs. 300 plus incentives based on performance. There are 176 arogya sakhis in the villages (approximately one per 500–1,000 people). They are monitored by 21 link workers and nine supervisors. By having different levels of workers, SEWA Rural is able to directly monitor each pregnant woman and her pregnancy outcome. This model of village workers provides a strong referral network backed by a base hospital, which is better able to reach the impoverished and rural communities in the project area.

9 Supervisors 7 PHCs

21 Link workers

176 Arogya sakhis (1 per 5001000)

202 trained Dais

168 Villages total population approximately 175,000

Figure 2: SEWA Rural Maternal Health Organizational Hierarchy

Source: In-service data of CHP, SEWA Rural.

SEWA Rural's maternal health services are also linked to the seven government PHCs in Jhagadia block. These PHCs are public institutions, with one MO and six ANMs in each institution. PHCs provide basic health care, delivery for normal pregnancies, and referral of complicated cases to the FRU. PHCs receive cheques for the JSY benefit distribution from the district government; they are responsible for monitoring the distribution of JSY benefits to pregnant women. The CY and JSY schemes began at SEWA Rural in November 2006. As a CY and JSY contracted institute, SEWA Rural provides free delivery to all BPL women who come to their hospital and distributes transportation money and attendant stipends as per the scheme norms.

SEWA Rural also makes specific use of the traditional dai. Dais work in villages and are often untrained. They are unable to provide effective emergency care because of their limited and/or informal education. Out of about 250 practising dais in the project area, 202 were screened based on their age, experience, and learning ability, and then received basic training at SEWA Rural. Refresher training is also provided every six months. Dais are trained to identify complications in a timely manner to ensure prompt referral to the hospital. As more women deliver now at institutions, the traditional role of the dai is changing. In SEWA Rural's model, the dai is seen as a birth companion, accompanying the mother to the institution. She is instrumental in ensuring that the mother is transferred to the hospital in time.

Findings

Quantitative

Data

The following data pertain only to SEWA Rural and the surrounding area. Thus, the data cannot be expanded to explain more than the developments in SEWA Rural's project area. In this section, a comparison has been made in different maternal health variables between the project area and the control area in order to understand the impact of SEWA Rural's intervention and its effects on social inclusion.

Variables such as MMR, percentage of institutional deliveries, the number of JSY and CY beneficiaries, and the number of ANC visits have been analysed. Utilization of health services is affected by a multitude of factors, such as the availability, distance, cost, and quality of services, personal health beliefs, and socio-economic factors such as the mother's education level and the household's living standards. Hence, we will also compare the outcomes of variables across socio-economic factors to determine the effectiveness of the interventions in reaching the additionally disadvantaged groups.

Maternal Mortality Ratio

MMR is an indicator that illustrates the effectiveness of the entire maternal health system, including the reach of antenatal check-ups, the number of births attended by a SBA, and the percentage of institutional deliveries. To decrease MMR, these process variables should be compared to ensure that the health system is reaching all communities.

The death of the mother during delivery, or as a result of complications during delivery, is still a major challenge. Haemorrhage, sepsis, obstructed labour, toxemia, anaemia, and unsafe abortions are the foremost causes of maternal death.

MMR has been on the decline since 2002 (Figure 3). MMR in 2007–2008 was almost one-third of MMR in 2002–2003, a reduction of nearly 70 percentage points. This overall decreasing trend demonstrates that maternal health in the SEWA Rural project area is improving and that mothers' lives are being saved. Effective and high-quality services, provided by SEWA Rural and bolstered by the governmental schemes, may have led to the declining trend in MMR.

MMR 800 Maternal deaths / 100 000 live 600 594 496 400 283 MMR 200 196 110 0 2002-03 2003-04 2004-05 2005-06 2006-07 2007-08 Time in Years

Figure 3: Maternal Mortality Ratio in Project Area, 2002-2008

Source: In-service data of CHP, SEWA Rural.

Antenatal Care

Safe and healthy delivery begins with ANC, as it is one of the most important stages for identifying potential complications. Those women who receive ANC are two to five times more likely to give birth in an institution than those women who do not receive any ANC.¹⁹

The arogya sakhis of SEWA Rural have improved the connection between the institution and the rural woman of Jhagadia by visiting the homes of these women. See Appendix 5 for the table on the performance of arogya sakhis on ANC indicators. The arogya sakhis are performing well; over 90 per cent of registered pregnant women are visited three or more times by their arogya sakhi, and this trend is increasing. The earlier a pregnant woman is identified in the village by the arogya sakhi, the better the care she will receive. A survey on ANC conducted by SEWA Rural confirms that the overall check-ups have improved over the years for both the project and control areas, although more improvements have been made within the SEWA Rural project area.²⁰

The sooner a pregnant woman receives care from an arogya sakhi, the sooner will she be encouraged to seek care from a trained health professional or at a medical institution. This element is critical to increasing the rate of SBA. The benefits of such a practice have been confirmed by the Ministry of Health and Family Welfare survey for 1992–2003, where a significant correlation was reported between the number of antenatal visits and institutional deliveries.²¹

¹⁹ K. S. Sugathan, V. Mishra, and R. D. Retherford (2001): *Promoting Institutional Deliveries in Rural India: The Role of Antenatal Care Services.* National Family Health Survey, Subject Reports, Number 20. International Institute for Population Sciences, Mumbai.

²⁰ Making of a Primary Health Centre, SEWA Rural.

²¹ Millennium Development Goals, India Country Report, 2005.

Institutional Delivery Rate

It was observed that the home is still the most common delivery location in the SEWA Rural project area, and has been the primary location for delivery since 2001. Nevertheless, institutional delivery is increasing. As indicated in Figure 4, institutional deliveries have increased by more than 20 per cent since 2001, including a 14 per cent increase since 2005. The increase in institutional deliveries in the past three years may be connected to benefits under the JSY and CY schemes, which were both implemented in the SEWA Rural project area in late 2006.

90 80 76.8 70 60 56.5 50 43.5 40 Home 30 Institute 20 10 0 2001-03 2003-04 2004-05 2005-06 2006-07 2007-08 Time in Years

Figure 4: Percentage Change in Home and Institutional Births in Project Area, $2001-2008^{22}$

Source: In-service data of CHP, SEWA Rural.

The data show that SEWA Rural's interventions have led to increased institutional deliveries, a statistic not mirrored in the non-project areas. Figure 5 shows that SEWA Rural's continued presence will aid Jhagadia in the move towards the MDG in India of achieving an 80 per cent institutional delivery rate by 2015.²³ However, addressing the disparity in the non-project area will require more work in order to reach this MDG target.

²² The home delivery variable includes 'on the way delivery' since those women who deliver on the way do not have skilled persons attending them. The number includes both live birth and still birth.

²³ Millennium Development Goals, India Country Report, 2005.

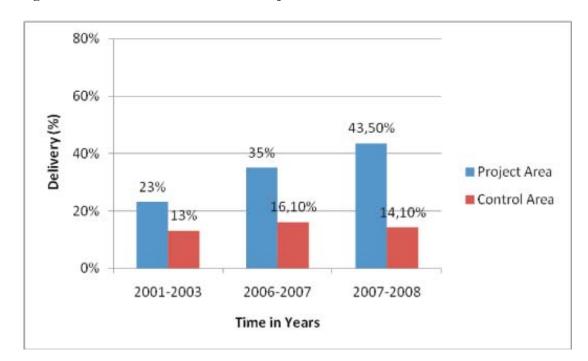


Figure 5: Institutional Deliveries in Project Area and Control Area

Source: In-service data of CHP, SEWA Rural.

Since the baseline years 2001–2003, there has been an increase in institutional deliveries in both the project and control areas. In the project area, the increase from the baseline year to 2007–2008 is 20.5 percentage points, while in the control area the increase is 1.1 percentage points. This difference in the institutional delivery rates can be related to the intervention programme implemented by SEWA Rural; as the CHP of SEWA Rural focuses on providing more reproductive health information to delivering mothers through the network of arogya sakhis, institutional attendance has improved.²⁴ The data presented in Figure 5 demonstrate that SEWA Rural's efforts have resulted in a significant increase in institutional deliveries compared to the control area.

Government JSY and CY Schemes

In SEWA Rural's project area, the CY and JSY schemes played an important role in increasing institutional births. By partnering with private institutions such as SEWA Rural, the government was able to increase the supply of hospitals that provide free care to socially excluded populations, making institutional deliveries more accessible. Table 3 shows that more than 1,000 women have benefited from CY in Jhagadia since its introduction by SEWA Rural in late 2006. The rate of women availing benefits from both the CY and JSY schemes at SEWA Rural has doubled since their implementation. This increase indicates that the schemes are reaching more BPL and ST women in Jhagadia block. JSY is operating in both the project and control areas, and hence can be considered as contributing to the increase in institutional deliveries in both areas.

²⁴ The study team cannot comment on the quality of the institution since we did not evaluate the capacity or services of the institutions.

Table 3: Number of CY and JSY Beneficiaries at SEWA Rural Hospital

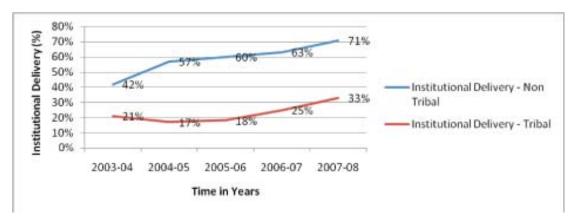
Scheme	11/2006-	04/2007-	04/2008-	Total
	03/2007	03/2008	06/2008	Beneficiaries
CY	Avg. 34	Avg. 62	Avg. 69	1,117
	per month	per month	per month	
JSY	Avg. 26	Avg. 50	Avg. 54	890
	per month	per month	per month	

Source: In-service data of Base Hospital, SEWA Rural.

Institutional Deliveries by Tribal and Non-tribal Women

After observing SEWA Rural's contribution to the improvement of maternal health care in Jhagadia and increased institutional delivery rates, it is necessary to examine if the intervention is reaching socially excluded women. Poverty is a crucial element in preventing women from attending an institution, yet social markers such as tribal status present additional hurdles to the reception of institutional care. Both BPL status and tribal status together mark most of the excluded women in Jhagadia.

Figure 6: Percentage Change in Institutional Deliveries among Non-tribal and Tribal Women in Project Area



Source: In-service data of CHP, SEWA Rural.

In Figure 6, one can observe that the trend in institutional delivery has increased for both tribal and non-tribal populations. Since 2003, the non-tribal population has increased its institutional delivery rate by 29 percentage points. The tribal population's institutional delivery rate has increased by 12 percentage points over the same period. However, it is important to note that the institutional delivery rates began to increase among the tribal population only in recent times.

Institutional Deliveries by Socio-economic Factors

In the discussion of economic status, established state-wide levels have shown that nearly all tribal members are BPL. To further discern economic and tribal status within the tribal population, the type of housing used by the family can be considered. The type of housing, specifically pakka, semi-pakka, and kutcha, has been used here.²⁵

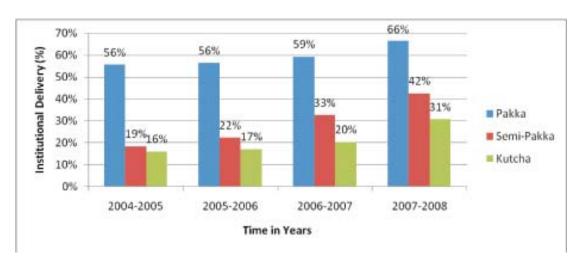


Figure 7: Institutional Delivery by Housing Type in Project Area

Source: In-service data of CHP, SEWA Rural.

Mothers belonging to households with a low standard of living are much less likely to give birth in a medical institution than mothers belonging to households with a medium or high standard of living. Figure 7 projects the accuracy of this prediction. The probability that mothers will deliver in an institution is higher if they live in pakka houses compared to mothers living in semi-pakka or kutcha houses. Over the past four years, a mother's living standard in the tribal areas of Jhagadia has had an impact on her place of delivery. In the project area, from 2004 to 2008, counselling efforts at the grass-roots level resulted in a 23 per cent increase in institutional births among mothers living in semi-pakka houses. In the same period, mothers living in pakka and kutcha houses had a 10 per cent and 15 per cent increase in hospital delivery respectively. There is a noticeably increasing trend among women living in semi-pakka houses. However, additional efforts are needed to reach the poorest women living in kutcha houses.

An additional factor for consideration is the use of electricity. Houses equipped with electricity and television sets increase the likelihood of the mother delivering at an institution compared to mothers living without such facilities. Indeed, rural mothers who are regularly exposed to the electronic mass media are several times more likely to give birth in a medical institution than mothers who are not similarly exposed.²⁶

²⁵ Pakka: brick house; semi-pakka: partial brick house; and kutcha: mud house.

²⁶ National Family Health Survey, Subject Reports, No. 20.

Distance from the home to the institution further influences a woman's choice of delivery location. Mothers who live 31 km or more from SEWA Rural are nearly twice as likely to deliver at home compared to mothers living only 15 km or less from SEWA Rural. See Appendix 8.

A number of studies cite the important role of socio-economic factors, but personal health beliefs also influence the demand and utilization of maternal and child health services. In consideration of this additional aspect of health care consumption, we highlight the correlations between delivery location and the woman's education level. In rural areas, where education levels are lower, women are influenced by social and cultural conditioning to tolerate suffering. Furthermore, pregnancy itself is considered a natural state of being rather than a condition that requires medical attention and care.²⁷

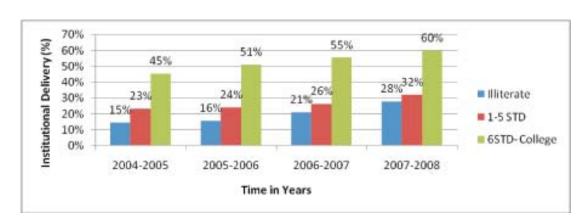


Figure 8: Institutional Delivery by Mother's Education Level in Project Area

Source: In-service data of CHP, SEWA Rural.

Figure 8 illustrates the impact of education on institutional delivery rates. Mothers with an education above Class 6 are more than twice as likely to give birth in an institution as mothers with an education level of Classes 1 to 5. Between 2004 and 2008, institutional delivery increased by 13 per cent among illiterate mothers; institutional births by mothers with a higher level of education increased by a comparable 15 per cent in the same time period. This similar increase among illiterate and educated women shows that focused efforts to reach BPL women in rural areas have increased institutional deliveries in Jhagadia.

The tribal women in the project and non-project areas have been actively courted by officials in charge of implementing governmental and non-governmental schemes aimed at increasing their attendance for institutional delivery. While the institutional attendance of all delivering BPL women is on the rise, special care and attention are required when considering the actions of

²⁷ National Family Health Survey, Subject Reports, No. 20.

tribal women. To learn about the barriers faced by individual women on their journey to hospital for institutional delivery, a qualitative analysis is given below of the interviews held with village women who have delivered both within and outside the SEWA Rural project area.

Qualitative Data

A total of 35 interviews with potential beneficiaries and two interviews with institutional service providers were conducted. These interviews present a qualitative picture of social inclusion in Jhagadia block and nearby villages. This report reserves judgment in terms of comparison between the SEWA Rural project area and the control area, reporting solely in terms of personal observations.

All the interviews conducted addressed the connection between institutions and the health workers involved in assisting each woman with her pregnancy (arogya sakhis, ANMs, dais, and ASHAs). As the focus of the case study was on learning the perspectives/views of the potential beneficiaries, no interviews were conducted with these health workers, despite what will be identified as their crucial role in the process of encouraging pregnant and potentially excluded mothers to attend institutions for delivery. Hence, the obstacles faced by these health workers—such as official BPL identification, incomplete or delayed explanations to pregnant women, or delay in the completion of benefit documents—cannot be addressed here.

Of the 27 interviews conducted in the project area, 24 interviewees belonged to BPL and ST groups. Out of these 27 women, 13 had institutional deliveries, one of which took place at SEWA Rural, where the interviewee received the CY benefit. Fourteen women from the project area were eligible for the JSY benefit: two women received the benefit, and four reported that the paperwork is still being processed. In the control area, seven out of the eight interviewees belonged to BPL and ST groups. Four deliveries took place in an institution and one at SEWA Rural, where the woman received the CY benefit. Two out of the eight women received the JSY benefit. See Appendix 3 for a table of comparisons.

From the interviews, three BPL cases that illustrate key lessons about the benefit schemes and the process of promoting institutional births were selected. Using the framework of the **three delay model (seeking care, reaching care, receiving care)**, the accounts of these three women are presented below.

Case Study 1

Daksha Vasava



Dakshaben, 24 years old, lives in Mouvi village, in the SEWA Rural project area. During her pregnancy, she was visited by the arogya sakhi five times and attended a health camp at Khareta, a nearby village. The arogya sakhi counselled Dakshaben on maternal nutrition, complication identification, delivery preparation, and complication readiness. Since this was her fourth pregnancy, she was not eligible for JSY. Her first two deliveries had taken place at home, but her third was in a hospital. Dakshaben and her husband, for reasons unexplained, planned for a home delivery. However, when she had labour pains,

the dai, who was trained by SEWA Rural, recommended that Dakshaben should go to a hospital. Dakshaben, her husband, mother, and the dai travelled by jeep for 90 minutes to a charitable trust hospital in Rajpipla. At the institution, Dakshaben's delivery was assisted by a doctor, nurse, and the dai. Her baby girl was born weighing a healthy 2.5 kg. Dakshaben stayed at the institution for two days after delivery with her mother. She paid Rs. 500 for transportation to the hospital and Rs. 100 to the dai for accompanying her. But because of the CY scheme implemented at the Rajpipla hospital, her delivery was free of charge. After returning home, she was visited by the arogya sakhi twice for post-natal counselling. Dakshaben said she would recommend this hospital to other women in her village. "I liked the good treatment given by the hospital," she said.

Dakshaben benefited from the CY scheme, and her story demonstrates how barriers can be overcome at each level. The process that allowed Dakshaben to reach an institution finally at the time of her delivery will be examined more closely.

Seeking Care: Dakshaben was educated by the arogya sakhi during the antenatal counselling sessions about complication identification and readiness, but had not been aware of the CY scheme before her delivery. The counsel that Dakshaben received played a critical role in her acceptance of an institutional delivery. The dai in this case was trained at SEWA Rural. Thanks to her training, she was able to identify the complications in Dakshaben's delivery and reacted by convincing the family to go to the institution and assisted them in accessing care at a hospital. Preparedness for facing

complications by all parties involved may have also played a role in obtaining available transportation in a timely manner. Thanks to awareness raising and proper training, the pregnant woman in this case sought the needed care at the time of delivery and was prepared enough to overcome the first barrier of delay.

Reaching Care: The network of health workers effectively worked together to refer Dakshaben to the institution in her time of need. The arogya sakhi and the dai both maintained a positive working relationship with the hospital, making them comfortable and confident enough to refer Dakshaben's case to Rajpipla hospital. Once the decision was made, preparedness on the part of all parties involved played a role in obtaining transportation and CY benefits in a timely manner. While this second barrier of delay was reduced because of the strong referral network, several obstacles still existed; the time taken to reach the hospital, 90 minutes, might have allowed further complications to manifest themselves. Dakshaben paid Rs. 500 for the jeep in which she travelled, which was more than the Rs. 200 transportation stipend that she received from CY. Although Dakshaben was not deterred by the high cost of the jeep and the long drive, transportation cost must be accounted for and compensation should cover the full cost of transportation.

Receiving Care: The CY scheme effectively fulfilled its objectives by supplying free EmOC to a BPL woman in an area that lacks sufficient public health facilities. Without this PPP, there would not have been a referral unit with sufficient staff where Dakshaben could have delivered. Had Dakshaben been required to pay for this service at the private hospital, she may have decided not to go because of financial difficulty. In this case, PPP made the hospital service accessible to the BPL woman at no cost. But Dakshaben's delivery in a Chiranjeevi institution could have been improved with the provision of more complete information regarding the CY scheme; as of yet, she is unaware that she has been a recipient of a government benefit. To increase institutional attendance and to reduce barriers to health care for tribal women, these issues of awareness and information sharing among villagers must be addressed at the institutional level.

Case Study 2

Vidhya Vasava



Vidhyaben, 22 years old, recently gave birth to her first child in her mother's home. She lives in SEWA Rural's project area, in Navagam village, where the arogya sakhi visited eight times and provided ANC. Vidhyaben had been informed about the CY and JSY schemes by her arogya sakhi, ANM, and her family. She was eligible for both schemes, and prepared her documents for JSY. Vidhyaben also visited SEWA Rural several times during the antenatal period. In the seventh month of her pregnancy, she went to her maternal home, as per the local custom, in a village called Saltar, located outside the

project area. Vidhyaben and her family planned an institutional delivery at Ankleshwar hospital, a private institution, near her mother's home. When she felt birthing pains, Vidhyaben went to the hospital as planned. At the hospital, the doctor told Vidhyaben that it was not her time to deliver and that she should return home. That evening, the pains came again. Vidhyaben's parents called the local dai (trained) to make sure that the pains were delivery pains. The trained dai concluded that Vidhyaben was in labour and said that all was normal. She recommended that Vidhyaben deliver at home. The dai, Vidhyaben's mother, and two of her aunts helped deliver a healthy baby with no complications. After Vidhyaben returned to her village, the arogya sakhi visited her for PNC. However, Vidhyaben was not taught how to bathe the baby or how to identify any other complications that might affect mother and child. Vidhyaben took her baby to SEWA Rural for a post-natal check-up. She paid a total of Rs. 800 for her delivery: Rs. 650 for the visit to Ankleshwar hospital, including transportation costs, and Rs. 150 for the dai. Although she was eligible for both schemes, the ANM did not collect the papers required for registering for JSY. Vidhyaben has not received any payment so far and does not know if she will receive the benefit in the future. She intends to deliver her next baby at an institution.

The case of Vidhyaben shows that the option for a woman to deliver in a hospital is affected by other factors outside her control. The dai and the referral network failed to provide institutional care despite Vidhyaben's efforts to deliver in a hospital. She was fortunate that her pregnancy was not complicated and that the dai was able to conduct a normal delivery, with a healthy outcome.

Seeking Care: During the antenatal period, Vidhyaben proactively sought care by going to SEWA Rural for numerous check-ups. The information she was given by the arogya sakhi was effective in teaching her about healthy birthing and likely influenced her decision to deliver in an institution. But due to the cultural tradition of delivering one's first baby at the pregnant woman's maternal home, Vidhyaben left the project area in her seventh month of pregnancy to be in her mother's home, which was located too far for her to deliver at SEWA Rural. Efforts to seek care at an institution for a second time were influenced by the local dai when she convinced Vidhyaben's family to remain at home. This case study makes it clear that those with the greatest say in deciding the birthing location must also be taught the benefits of institutional delivery. While Vidhyaben's education and experience encouraged her to go to Ankleshwar hospital, her parents had not yet been persuaded. The pursuit of institutional care by the family should be considered equally important as the pursuit of the pregnant woman herself.

Reaching Care: Reaching the hospital at the first signs of labour showed that Vidhyaben was prepared to attend the hospital and had done her part to arrive there. The actions of her doctor, however, illustrate the gaps in providing institutional care to impoverished and disadvantaged groups. One cannot say precisely why the doctor sent Vidhyaben back home, but it should be acknowledged that receiving health care is so difficult for BPL families that the likelihood of their returning to the institution after being dismissed by a doctor is significantly diminished due to travel costs. As an additional barrier, the dai who worked with Vidhyaben was not connected to the institution. The relationship between Ankleshwar hospital and the dai in Saltar village was not deep or strong enough to encourage the dai to send Vidhyaben to the hospital. This prevented Vidhyaben from realizing the birthing plan that she and her family had prepared. The dai continues to influence women in villages since she is a member of their community and is an integral part of their birthing traditions. Vidhyaben's story illustrates that efforts to bring tribal women to SBA and hospitals will not be effective unless attention is also given to the prevailing birthing traditions and until the members of the women's family are also counselled.

Receiving Care: Vidhyaben received institutional ANC and PNC despite the problems she faced in delivering at Ankleshwar hospital. She had been made aware of potential problems and newborn care. Furthermore, the ANM and the arogya sakhi in Vidhyaben's village succeeded in communicating information to her about SEWA Rural and the CY and JSY schemes. Because of the health worker's efforts, Vidhyaben was made aware of schemes and institutions within her reach, and was able to form a comprehensive birth plan. Yet breaks in the institution—health worker connection existed, as Vidhyaben was not attended to at her hospital of choice and is still waiting for her JSY benefit. With considerable efforts being made to help BPL women access SBA, reach the hospital, and become aware of government schemes, the system must be able to respond adequately once the patient reaches the institution

Surmi Vasava



Surmiben, 24 years old, gave birth to her second son in Natrang hospital, a government PHC outside Jhagadia. Surmiben's village Kantipada is located in the SEWA Rural project area. She was visited regularly by the arogya sakhi for ANC. Surmiben also visited her local PHC once for an antenatal check-up. Her first child did not survive, so Surmiben's mother, mother-in-law, and ANM decided that she should have her second baby at the hospital. Asked why Surmiben's family preferred the hospital, she explained, "The treatment in a hospital is supposed to be better." Surmiben's labour began in the middle of the night. She went to

the PHC by auto rickshaw, arriving within 20 minutes. At the PHC, the staff informed Surmiben that no doctors were available so late at night; she would have to give birth with the aid of her dai. There were no delivery complications, and Surmiben's baby was born healthy. She stayed at the PHC for 30 minutes after giving birth, with her husband, mother-in-law, aunt, and the dai. Comparing her previous home delivery with her most recent delivery, Surmiben said that she saw no difference between home and hospital deliveries. She received information on PNC, feeding the baby, keeping the baby warm, and nutrition for the baby. However, she was not taught how to identify post-natal complications for her baby or for herself. Recently, Surmiben took her child to SEWA Rural for a post-natal check-up and immunization. Her delivery cost a total of Rs. 200; transportation to the hospital cost Rs. 100 and the payment to the dai was Rs. 100. Surmiben had been eligible for the JSY scheme and had been informed about the scheme by her ANM. However, because she had not filled out any paperwork, she did not receive any benefits. Surmiben plans to deliver her next baby at a hospital. When asked if she would recommend that other women go to a hospital, she replied, "Yes. Women should come to the hospital, but not to the government PHC because in other hospitals women get doctors, but at night the government PHC has no doctors."

Unfortunately, Surmiben's experience at the government PHC is not an isolated event. Her case highlights the importance of providing a sufficient supply of doctors and hospital facilities to care for the women when they need medical attention.

Seeking Care: Surmiben's unsuccessful previous pregnancy led her to seek more care from her arogya sakhi, care that the arogya sakhi helpfully provided. Her connection to the arogya

sakhi and ANM gave Surmiben an opportunity to utilize the available institutions near her and to form relationships with other women in her area and the institution. It should be noted that this care was also sought by Surmiben's relatives, indicating a much strengthened connection between the individual patients and the hospital. Despite the strong connection to the maternal health system, Surmiben was not properly informed of the schemes, nor was she assisted in preparing the necessary documents. For women to avail these benefits, they need to be made aware of them during the antenatal period so they are able to prepare adequately.

Reaching Care: The arogya sakhi and ANM's links to the hospital were sufficiently strong to encourage Surmiben to attend check-ups and to give birth in the government institution. Again, we see problems in the health worker—institution connection, for Surmiben was unable to receive any JSY benefit; neither the ANM nor the arogya sakhi helped her in completing the necessary paperwork. Surmiben was able to quickly hire a rickshaw, so transportation was not a barrier for her. The transportation cost would have been covered by the stipend provided by JSY had she only received it. Surmiben arrived at the PHC in a very short time since the facilities were accessible to her. However, once she arrived, she was unable to get care from an SBA or a trained PHC staff member.

Receiving Care: The lack of doctors in the middle of the night at Surmiben's local PHC is a major hurdle for women in her situation. Although many women may have been encouraged to deliver at an institution, the available facilities are unable or insufficient to support most of them. Doctors are few, and in some cases completely unavailable. It was not clear which PHC staff member received Surmiben, but had she been a trained health worker she should have remained with Surmiben during her delivery. Surmiben's assessment of the situation as being identical to delivering at home was almost correct; the delivery process was the same, but with the added cost of transportation. Had there been complications during her delivery, there were no doctors available to offer care despite this being an institution. Situations such as this not only fail to assist women in need, but also add to their distrust of government aid. While Surmiben may recommend hospitals to other women in her area, it is certain that she will give an unsatisfactory review of the government hospital, which will no doubt affect the decisions of other women.

These three case studies highlight the ongoing need for increased awareness about the importance of an SBA at the time of delivery and the benefits offered by the schemes to BPL women. While the majority of women we interviewed were eligible, few knew about the government schemes or how to prepare for them. It is essential that these women be provided this information during the antenatal period to facilitate preparedness for availing the benefits. Situations such as Surmiben's require a closer look at the quality of health care provided by governmental institutions, which is discussed in the following section.

PHC and Institutional Views

In an effort to better understand the roles of PHC and other institutions involved in promoting births, the MO at the Moryana PHC in Jhagadia was interviewed. The discussion added to an understanding of the process of promoting institutional births and the role of PHC. Base on this discussion, three themes or areas were identified in the challenges faced by the institution.

1. Shortage of doctors: Management and staffing are challenges faced by all health institutions in rural areas. Trained staff members are crucial in promoting institutional births because they have the necessary technical knowledge and skills that can save a mother's life during a complicated delivery. If there are no skilled health professionals, then there is little benefit to delivering at a hospital.

"I have meetings and trainings every week, so for about 15 days of the month I am out of the PHC. I am the only medical officer here."

-MO, Moryana PHC

Recruiting and retaining MOs and gynaecologists in rural health facilities is a difficult challenge. Salaries are higher in private hospitals and larger institutions. Rural areas often do not offer the same amenities and lifestyles that doctors can find in more urban or cosmopolitan areas, such as comfortable houses, good schools for their children, entertainment facilities, shopping centres, etc. Doctors are not interested in staying in underserved areas when they are capable of earning more somewhere else. Rural hospitals also lack the financial resources to offer competitive salaries.

"We [SEWA Rural] paid our gynaecologist a Rs. 23,000 salary per month. This year it was increased to Rs. 30,000. Other private hospitals pay Rs. 50,000, but SEWA Rural has other departments and staff to pay at par. We can't concentrate all our resources on one doctor."

-Administrative officer, SEWA Rural

Health institutions that lack MOs/gynaecologists force women to travel longer distances to reach the care they need. When women have complications during delivery, this delay in reaching care and receiving care can result in maternal death. The government should continue to assist in the provision of universal coverage of EmOC, particularly in socially excluded areas where maternal deaths are likely to be the highest.

2. Difficulties in obtaining benefits: The process of receiving benefits still suffers from a number of problems. The first barrier to effectively distributing benefits is lack of awareness about the available schemes. Interviews with relevant respondents revealed that knowledge of

the schemes was not universal at the village level. This problem must be remedied. Arogya sakhis, ASHAs, and ANMs play a major role in disseminating information to the women. When these village health workers are well trained, they are more effective in explaining the benefit reception process to potential beneficiaries.

Once women are informed about the schemes, they must complete the necessary paperwork and provide the documents needed to prove their eligibility for monetary assistance. Many problems arise at this stage. Arogya sakhis work with ANMs to help women resolve any questions that they might have about paperwork and documentation, and SEWA Rural strives to get eligible women to attend antenatal clinics at their hospital so that the paperwork can be completed before the delivery date. This strategy works for those women who deliver at SEWA Rural. However, women who deliver at other institutions or at home continue to face problems in getting their paperwork processed and receiving the benefits in a timely manner.

"Any ST should get it [government benefit]. No BPL card is required."
—MO, Moryana PHC

The documents required for receiving benefits under JSY are the following: BPL card (or when not available, an income certificate confirmed by the village head); the JSY form completed by the ANM; and certificate of delivery location in the hospital with the relevant hospital records (when applicable). Difficulty in presenting the correct documents prevented some women from getting the benefits. The paperwork is meant to ensure that there is no fraud and that the money is only being given to eligible mothers who are the most in need. However, the reality on the ground is that this paperwork process often prevents women from getting the assistance they need.

Figure 9: Process of Obtaining JSY and CY Benefits

Awareness: Pregnant women learn of the schemes and process from ANM, ASHA, arogya sakhi, or family.

Paperwork: Women present BPL cards endorsed by village leader and other required documents. ANM aids in preparing and completing forms.

Enrolment: ANM submits the forms to PHC or institution. Copies are made and sent to district level. (SEWA Rural enrols beneficiaries at the institution under counsel of arogya sakhi, not ANM)

Distribution: Women receive money at the time of discharge from hospital or the money is presented to women by ANMs at their homes

When the documents have been received and enrolment has been completed, women should get the money on their discharge from the hospital. Incidents exist where the government delayed in sending cheques to beneficiaries. Addressing these barriers in the distribution process of government benefits will create a more efficient system and will allow more BPL women to get the assistance they need in time.

3. Lack of presence in villages: The cultural disconnect between villages and health institutions also presents a barrier. To make village women feel more comfortable in attending an institution, the institution must make extra efforts to welcome them and to reach out to them on their terms. The simple provision of government cash assistance to village women will not motivate them to go to an institution. Potential patients need to see the work of the institutions and feel that there is a safe relationship between them and the health providers. The doctor at the PHC makes this point clearly:

"This money [JSY assistance] will not help. We have to go to their house four or five times to get them to change their minds and to get them to deliver in a hospital."

-MO, Moryana PHC

SEWA Rural established its presence in the villages by training arogya sakhis, by offering health camps in the villages, by making frequent visits to tribal homes, and by fostering relationships with village women. By building these bridges between the institution and the village, women will come to trust the institutions more and will be more likely to seek care with that hospital. Yet there are still disconnects even in the SEWA Rural area. One family who was interviewed lamented the lack of attention from their arogya sakhi, who never visited them nor offered her services. Social inclusion of BPL and tribal families requires continual effort and consideration from institutions and hospitals.

Conclusion

Lessons Learned

From the analysis of the quantitative and qualitative data, three key lessons emerge regarding the process of promoting institutional births. These lessons are as follows:

Strong Referral Networks Connecting Village Women to Institutions

To reach BPL and tribal women, their link to the institution needs to be strengthened. By improving outreach to and communication with socially excluded women, institutions can ensure that more of these women will access their services. The system of the arogya sakhi, implemented by SEWA Rural, has been successful in nurturing such linkages and in improving maternal health. By visiting pregnant women at their homes in the villages, arogya sakhis gain the women's trust. Village health workers and volunteers are also in the best position to increase awareness of government schemes by directly informing eligible women about the benefits and by ensuring that women are ready with the necessary documents for availing these benefits. Using village residences to impart this information can also create linkages. As village workers are trained in the aims and objectives of the institution, and are knowledgeable about the benefits and advantages it offers, they will share this information with neighbours and patients. The problems and hardships faced by these women volunteers, and the role they play as links between hospitals and pregnant women, need to be studied in more detail.

After they decide to seek institutional care, transportation can be the next obstacle for pregnant women. Most of the women we interviewed were able to access adequate transportation from local private vehicle owners to reach the hospital, once they had decided to deliver at an institution. This is evidence of improved community participation, better infrastructure and roads, and more targeted information reaching village women. Additionally, a recent programme called 108 Ambulance offering free transportation services of ambulances has been implemented in Gujarat. Women call the telephone number 108 and an ambulance then arrives to take them to the hospital. The ambulance personnel currently keep a list of all pregnant women in the area and their expected delivery dates. This information has helped in improving service to local women to get them to the hospital in time for delivery. This project was implemented after our respondents had delivered their babies. Hence, this case study was unable to determine the effectiveness of the programme.

Improvements in the Distribution of Government Schemes

The findings showed that all eligible women were not receiving the benefits of government schemes. Often the problem was related to paperwork or to lack of awareness. In the case of

JSY cash assistance, failure to receive the benefit in time meant that disadvantaged women would spend less money on antenatal nutrition. If JSY is intended to provide financial assistance before delivery, its distribution process must be reorganized.

The government is responsible for streamlining the flow of money to PHCs, CY institutions, and ANMs so that these field-level workers are capable of disbursing money directly to beneficiaries. Difficulties in the system at the district level create problems in distributing the money efficiently. Monitoring and accountability ensure the honest and timely transfer of funds. Delays were a common obstacle. Improved cash flow between government institutions, distributing agencies, field workers, and village women will increase the success rate.

Offering free hospital care and transportation stipend help women overcome their financial hardship, but these provisions do not address the women's motivation or willingness to travel to an institution. Adding incentives to the JSY and CY schemes for BPL women would encourage them to deliver in hospitals with SBAs.

Increase the Supply of Doctors and Improve and Expand Facilities

Institutional care is in short supply, particularly in rural areas such as Jhagadia. Even if all BPL women wished to deliver in hospitals, it would not be possible. There are simply not enough staff members and facilities to accommodate them all. While PHCs are established institutions, they lack the facilities and staff to care for all women who need medical attention. PHCs should be made more functional, with increased, improved, and expanded provision of medicine, equipment, beds, and, most importantly, sufficient skilled personnel. PHCs require at least two MOs to provide care 24 hours a day. As it was observed in the case of Surmiben, non-availability of doctors has a dramatic impact on delivering women. The shortage of staff must be addressed at the state and national levels in order to bring about comprehensive changes in the training and placement of doctors in India. To address the shortage of gynaecologists in the government system, more private gynaecologists should be contracted through innovative schemes like CY in order to increase institutional coverage.

As links between the village and the institution are built and strengthened, institutions are responsible for fulfilling their obligation to the patients they have recruited. If hospitals fail to provide a basic level of care to village women, this will negatively affect the relationship that the institutions have worked so hard to create. When village women do not get the medical attention they seek from the hospital, it makes them distrust the institution. This was clearly seen in the case of Surmiben. Negative encounters at an institution hurt the hospital's reputation and make women more hesitant to return for care.

Recommendations for Stakeholders

Based on the findings of the case study and the lessons learned, specific recommendations are made for improving and promoting safe deliveries among socially excluded and BPL women. Micro- and macro-level changes must be implemented to increase the SBA rate and to decrease MMR. The following is a list of recommendations for the different stakeholders.

Government: At the central and state levels, the government can develop and adopt innovative policies, better procedures, and new partnerships to strengthen and expand its role in promoting safe and healthy births. Here are some specific recommendations at the government level:

- Improve the distribution and flow of money through the state, district, and block levels so that it reaches the field in a more efficient and timely manner. Take the time to work with each link in the distributive chain. With improved awareness at each level, it will be easier to note which links are operating efficiently and which links require attention.
- Include incentives in JSY so that the women who deliver in hospitals receive additional benefits. Beyond the transportation stipend, additional awards will motivate BPL women to seek out and reach health care facilities.
- As the role of the dai is changing because of the promotion of institutional births, more
 efforts must be made to incorporate the experiences of dais and TBAs and to ensure their
 acceptance into the formal health system by the community. This will further increase the
 inclusion of excluded women.
- Enrol more hospitals under the CY scheme to increase the availability of and access to maternal health care for BPL women. This will strengthen PPP and will bring about increased coverage of BPL families.
- Develop a comprehensive plan for the recruitment and distribution of doctors throughout
 the state by offering better and more attractive salary and incentives schemes. A reward
 for servicing needy communities offered by underserved institutions will help increase
 applications from doctors. Furthermore, the stigma of rural hospital employment among
 trained professionals must be confronted. As of now, working with excluded members of
 society is viewed unfavourably.

Institutions: Hospitals, both governmental and non-governmental, must extend the outreach of the programmes by considering and implementing the following steps:

- Enhance village participation by organizing health camps and introducing a community
 participation programme that is designed to disseminate information among peer groups.
 Relations of trust should be fostered between patients and institutions to reduce the fear of
 institutional birth and to increase confidence.
- Educate patients during their hospital visits on the benefits and coverage of CY and JSY, including how to effectively complete the process and obtain benefits. State clearly what is required of the patient and what she must expect in the weeks to come.

- Create strong communication networks with village-level workers by providing them with sufficient training and telephones for use in the field. Encourage the use of these tools at any time of the day. Utilize birth attendants who already have a position in tribal communities by offering incentives for their cooperation in an effort to work with and not against tradition.
- Focus on staffing issues, including recruiting, hiring, and retaining doctors and other trained health staff. Explore incentives beyond monetary compensation to attract newly trained staff.
- Encourage inclusive, respectful behaviour among doctors and staff towards excluded groups. Set precedents within the institution to ensure equal respect to all patients.

Villages: At the village level, community members, leaders, workers, and individual women all play a part in supporting maternal health. Each village can take the following actions to improve maternal health care:

- Assist women in obtaining BPL cards and the necessary forms for receiving government benefits without delay. Spread information about each step involved in obtaining BPL cards and forms through group meetings involving all families in the village in order to reduce social exclusion.
- Bridge the information gap between traditional practices and modern health care practices. TBAs have a responsibility to provide the best possible care to delivering women, and local leaders have a responsibility to accept institutions into their community. If efforts by institutions to approach tribal people are increased, there should be an equal increase in efforts by tribal communities to obtain information on hospital care.
- Offer numerous opportunities to women for receiving visits by local trained health workers.
 Health workers should visit women in the early stages of pregnancy at their homes and should attend to them many times during the pregnancy and thereafter to develop a relationship of trust. This will provide the women with more individual attention and improve the quality of care that they are getting.
- Create a system of checks and balances similar to the hierarchy created by SEWA Rural, with link workers and supervisors to monitor the work done in the village. Without surveillance, the referral network may weaken and areas requiring attention may be overlooked.
- Prepare for emergencies on a community-wide basis well before the date of delivery. Where resources are scarce, more efforts are required for securing transportation to institutions through mapping and tapping local private vehicle owners. The recent addition of the 108 Ambulance system has facilitated transportation, but community-level efforts to provide telephone service and accompaniment by someone when family members are unavailable will also prepare and comfort women on their journey to the hospital.

The promotion of safe births in the state of Gujarat, at the most basic level, requires the implementation of health services that are within the physical and economic reach of BPL and tribal community members. More doctors, institutions, and medical information are needed to

serve a large rural population that is distant from modern health practices. But securing these resources will not close the gaps between the economic and social 'haves' and 'have-nots'. Additional efforts must be made to reach a population that has been identified as disadvantaged in terms of maternal health care. JSY, CY, and the SEWA Rural health system have managed to incorporate women into the modern health care system in record numbers in the last two years, but their efforts have not been enough to overcome the disparity between excluded and included groups in terms of institutional births. Comprehensive efforts by various stakeholders, both individually and collectively, must be strengthened to provide the most complete care to all delivering mothers.

To ensure social inclusion, attention must be given to prevailing cultural and traditional practices. At the same time, complete and all-inclusive information about SBA and institutional deliveries should be given to the community. The increase in SBA and institutional deliveries is a vehicle for the reduction of MMR and for ensuring a safe and healthy family. Efforts to bring health care to the community must reach all members of society. Good, effective, and accessible health care is not a luxury; it is a human right.

References

- Barnes-Josiah, D., C. Myntti, and A. Augustin (1998): The "Three Delays" as a framework for examining maternal mortality in Haiti. *Social Science and Medicine*, 46: 981–93.
- Bhat, R., A. Singh, S. Maheshwari, and S. Saha (2006): *Maternal Health Financing: Issues and Options: A Study of [the] Chiranjeevi Yojana in Gujarat*. Indian Institute of Management, Ahmedabad, India.
- Directorate of Economics and Statistics, Government of Gujarat (2006): *Socio-economic Review*, *Gujarat State*, 2005–2006.
- Health and Family Welfare Department, Health Facilities GIS Map, Government of Gujarat. http://www.gujhealth.gov.in/health_programmes/rural%20health/Hlth_Flts.htm
 Accessed on 31 July 2008.
- Kabeer, N. (2006): Social Exclusion and the MDGs: The Challenge of 'Durable Inequalities' in the Asian Context. Institute of Development Studies, University of Sussex, Brighton, UK.
- Ministry of Health and Family Welfare (2005): *Janani Suraksha Yojana: Guidelines for Implementation*. Government of India, New Delhi.
- Ministry of Statistics and Programme Implementation, Central Statistical Organisation (2005): Millennium Development Goals, India Country Report, 2005. Government of India, New Delhi.
- 2005–2006 National Family Health Survey (NFHS-3), Ministry of Health and Family Welfare, Government of India, New Delhi.
- ORG Centre for Social Research (2006): Coverage Evaluation Survey 2006: Gujarat Final Report. New Delhi.
- Singh, A., D. Mavalankar, A. Desai, S. R. Patel, and P. Shah (2007): *Human Resources for Comprehensive EmOC: An Innovative Partnership with the Private Sector to Provide Delivery Care to the Poor.* Indian Institute of Management, Ahmedabad.

- SEWA Rural (2003): *Making of a Primary Health Centre: The SEWA Rural Experience*. Jhagadia, Gujarat.
- Sample Registration System, Maternal Mortality in India: 1997-2003 Trends, Causes and Risk Factors Registrar General, India, New Delhi.SRS 2001–2003.
- Sugathan, K. S., V. Mishra, and R. D. Retherford (2001): *Promoting Institutional Deliveries in Rural India: The Role of Antenatal Care Services*. National Family Health Survey, Subject Reports, Number 20. International Institute for Population Sciences, Mumbai.
- UNICEF India, country website 'Safe Motherhood Day 2008'. http://www.unicef.org/india/health_4223.htm. Accessed on 31 July 2008.

Annexure I

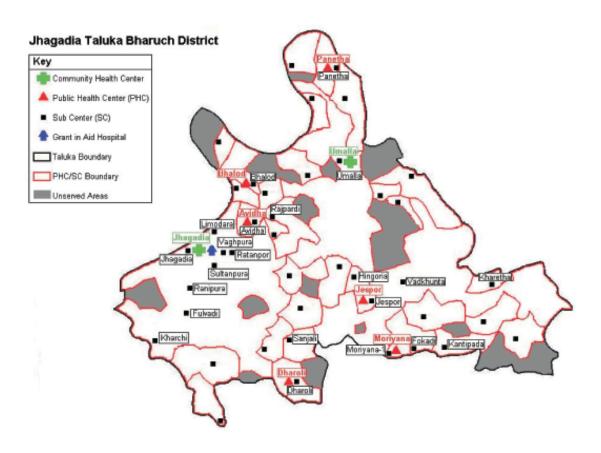
List of Interviewees and Villages

	SEWA RURAL PROJECT AREA VILLAGES					
#	Type of delivery	Name of respondent	Name of village			
1	Institution	Rekhaben Pravinbhai Vasava	Bhimpor			
2	Home	Shakuntalaben Rajeshbhai Vasava	Bhimpor			
3	Home	Vanitaben Rajeshbhaii Vasava	Sanjali			
4	Home	Manjulaben Kantibhai Vasava	Sanjali			
5	Home	Pannaben Mukeshbhai Vasava	Sanjali			
6	Institution	Reenaben Rajubhai Vasava	Kantipadi			
7	Institution	Sureshben Dhirubhai Vasava	Kantipadi			
8	Institution	Dakshaben Chandrasing Bhai Vasava	Movi			
9	Home	Saralaben Chandubhai Vasava	Katol			
10	Institution	Vanilaben Subhashbhai Vasava	Katol			
11	Home	Kamalaben Bachubhai Vasava	Sajanvav			
12	Home	Jasvantiben Gulabsing Vasava	Sajanvav			
13	Institution	Vidhyaben Kamleshbhai Vasava	Navagam			
14	Home	Taraben Kanaiyabhai Vasava	Fokadi			
15	Home	Nayanaben Satishbhai Vasava	Bandabeda			
16	Home	Jashodaben Sahindrabhai Vasava	Bandabeda			
17	Home	Kuntaben Parsottambhai Vasava	Ratanpor			
18	Institution	Saktariben Imranbhai Siddi	<u>Ratanpor</u>			
19	Institution	Mitaben Sanjay Bhai Machhi	<u>Velugam</u>			
20	Institution	Ravinaben Pravinbhai Vasava	Kariyapura			
21	Institution	Hiralben Hiteshbhai Patel	<u>Umalla – 2</u>			
22	Institution	Bhavishaben Rakeshbhai Bariya	Jhagadiya			
23	Home	Sonalben Sanjaybhai Vasava	<u>Krushnapari</u>			
24	Institution	Mosina Malek	Tarshali Amod			
25	Home	Biju Vasava	Shir			
26	Institution	Silpaben Rupeshchandra Balsari	<u>Jamoli</u>			
27	Home	Darshanaben Mukeshbhai Vasava	<u>Jamoli</u>			

	CONTROL VILLAGES					
#	Type of delivery	Name of respondent	Name of village			
1	Home	Bhavna Vasava	Kamaliya-1			
2	Institution	Surajben Ajitbhai Vasava	Sodgam			
3	Home	Rekha Vasava	<u>Zaranavadi</u>			
4	Home	Ramilaben Dasharatbhai Vasava	<u>Zaranavadi</u>			
5	Institution	Anisha Kadiwala	<u>Zarana</u>			
6	Home	Tinaben Jashavantbhai Vasava	<u>Zarana</u>			
7	Institution	Mariya Fatasing	Mota Mandala			
8	Home	Darshanaben Kailashbhai Abhesing	Mota Mandala			

Annexure II

Map of Jhagadia Block and Health Centres



Source: Health and Family Welfare Department, Government of Gujarat.

Annexure III

Survey Instrument for Village Interviews

Surveyor:	Survey Number:		Date:	/	/2008		
PERSONAL INFORM							
Name:		Age (years): Villa		Villa	age:	Block:	
BPL: Y / N	Circle:	ST S	C NA				
Married: Y / N	Religion	:	Type of	house	: Pakka /Sei	mi-pakka/	Kutcha
Electricity: Y / N	TV: Y	/ N	Monthly	per c	apita income	e:	
Total number of family me	embers:		Monthly income:				
Mother's education:			Mother's occupation:				
Father's education:			Father's occupation:				
Delivery date: / / Loca			of delivery	y:			
Outcome: LB If live:	M / F	No. of pr	evious pre	gnan	cies:		
SB MTP							
Abo							
No. of children: male:	e:	Location of last delivery:					
total:		home / ir	nstitu	tion / NA			

AN	TENATAL CARE	
1)	A) Were you visited by the village health worker?	
	B) How many times did she visit you?	
	C) Did they teach you (circle for yes)	
	Maternal nutrition	Y / N
	Supplement/immunization	Y / N
	How to identify complications	Y / N
	Importance of institutional births	Y / N
	Preparation (birth kit, clean clothes, transportation)	
	Complication readinessOther (specify)	
2)	A) Did you attend/receive ANC from a health	Y / N
	centre/institution?	
3)	A) Did you make a birth plan for the delivery	Y / N
	location?	
4)	A) Did your delivery take place at the location	Y / N
	that you had planned for?	
	B) If this location was changed, why?	Comments:

5)	Who was involved in making the decision about	1) Myself		
	the delivery location?	2) Husband		
	Circle all that apply.	3) Mother-in-law		
		4) Mother		
		5) Village health worker		
		6) ANM		
		7)Dai		
		Other (specify):		
6)	A) Was the location of delivery accepted by	Y / N		
	your family members?	Comments:		
7)	A) Why didn't you deliver at an institution/home?	Comments:		
8)	A) Why did you deliver at home/institution?	Comments:		
DE	LIVERY			
9)	A) Where was the location of your delivery?	1)Home (proceed to question	n 10)	
		2)Institution (proceed to quest	tion 11)	
For	· HOME DELIVERIES			
10)	A) In whose home did you deliver?	1) Mother-in-law's home		
		2) Mother's home		
		3) Own home		
		4)Other (specify)		
	B) How far is the home from an institution?	SEWA	km	
	Distance	PHC	km	
	C)How far is the home from an institution? Time	SEWA	time	
		PHC	time	
For	· INSTITUTIONAL DELIVERIES			
11)	A) In which institution did you deliver?	1) Private (SEWA Rural)		
		2) Government		
		3) Other		
	B) How did you get to the institution?	1) Bus		
		2) Car/jeep		
		3) Auto rickshaw		
		4) SEWA Rural vehicle		
		5) Other (specify)		
	C) How long did it take you to get to the hospital?	ti	me	

ALL DELIVERIES	
12) Who assisted in your delivery?	1) Doctor
Circle all those who apply.	2) Nurse
	3) ANM
	4) Dai
	5) Arogya sakhi
	6) ASHA (other village health
	worker)
	7) Mother/mother-in-law
	8) Other (specify)
	Comments:
13) A) At the time of delivery, what happened?	Comments:
B) Did you face difficulties at the time of delivery?	[possible problems: Doctor was
	not available, bleeding, extended
	labour, infection, etc.]
C) If yes, what types of difficulties?	
14) A) Were there any complications?	Y / N
B) If yes, what were they?	1) Bleeding
	2) Extended/obstructed labour
	3) Seizures
	4) Infection
	5) Other (specify)
15) A) Was the baby healthy?	Y / N
B) What was the baby's birth weight?	kg
For INSTITUTIONAL DELIVERIES	
16) A) How many days were you at the hospital?	days
B) How many family members stayed at the	person/people
hospital with you?	
C) Would you recommend this hospital to other	Y / N
women?	
D) Why?	Comments:
POST-NATAL CARE	
17) After the delivery, were you taught	
A) Breastfeeding practice	Y / N
B) How to feed the baby	Y / N
C) Withholding pre-lactate foods	Y / N
D) Bathing the baby	Y / N
E) Wrapping the baby for warmth	Y / N
F) Mother's nutrition	Y / N

	G) Family planning	Y / N
	H) How to identify complications of the baby	Y / N
	I) How to identify complications of the mother	Y / N
	J) Other	Specify
18)	A) Have you had a post-natal check-up?	Y / N
		Comments:
CO	STS	
19)	A) What was the total estimated cost of your	Rs.
	delivery?	
	B) Birth attendant cost	Rs.
	C) Transportation cost	other goods
	D) Hospital cost	Rs.
	E) Medicine cost	Rs.
	F) Other costs	Rs.
		Specify cost:
		Rs.
GO	VERNMENT BENEFITS	
20)	A) Were you eligible for benefits?	Y / N
		JSY
		Chiranjeevi
		Both
21)	Did you receive benefits from a government	
	scheme?	
	A) JSY	Y / N
	B) Chiranjeevi	Y / N
	C) Both	Y / N
	D) How much did you receive?	Rs.
	E) How did you learn about the scheme?	1) Arogya sakhi
		2) Media, TV, radio
		3) Pamphlet
		4) ANM
		5) Neighbours/friends
		6) Family
		7) Others (specify)
22)	A) Did you face any difficulty in receiving the	Y / N
	benefit?	Comments: [delay in receiving
		money, did not receive money,
		did not get the full amount, other]

EXPERIENCES / FUTURE PLANS	
23) A) If the delivery location was changed from that	Comments:
of the last delivery, explain why.	
24) A) Where do you want to deliver your next child?	1) Home
	2) Institution
	3) NA
B) If the delivery location was/will be changed,	Comments:
why?	

Annexure IV

Qualitative Interview Results

	SEWA Rural Project Area N (%)	Control Villages N (%)
Total interviews	27	8
BPL	24 (88.8)	7 (87.5)
ST	25 (92.59)	7 (87.5)
Home deliveries	14 (51.8)	4 (50)
Institutional deliveries	13 (48.1)	4 (50)
SEWA Rural	1 (7.4)	1 (12.5)
PHC	1 (3.7)	1 (12.5)
Other	10 (37)	2 (25)
JSY eligible	14 (51.8)	6 (75)
JSY received	1 (7.4)	2 (25)
JSY processing	4 (14.8)	1 (12.5)
CY utilized	2 (7.4)	1 (12.5)

Annexure V

Outcome of CY Scheme: Mothers and Newborns Saved

Total	Expected	Maternal	Mothers	Expected	Newborn	Newborns
deliveries	maternal	deaths	saved	newborn	deaths	saved
under CY	deaths	reported	under CY	deaths	reported	under CY
		under CY			under CY	
142,940	624	31	611	6,561	454	6,107

Source: Human Resources for Comprehensive EmOC: An innovative partnership with the private sector to provide delivery care to the poor.

Annexure VI

Antenatal Care

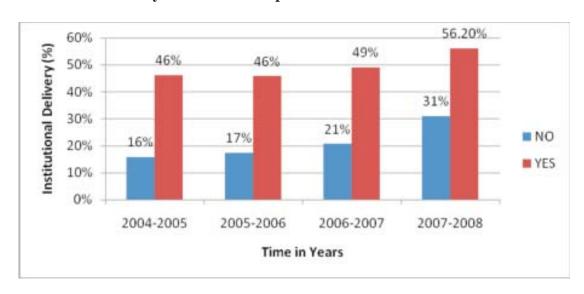
Antenatal care	2004–2005	2005-2006	2006-2007			
No. of times registered pregnant women are visited by the arogya sakhi						
None	82	51	17			
1	56	58	43			
2	81	90	70			
3+	3,560	3,364	3,449			
Total	3,779	3,563	3,579			
First time received by arogya sakhi						
First trimester	1,171	1,372	1,688			
Second trimester	1,826	1,683	1,559			
Third trimester	673	463	361			
Total	3,670	3,518	3,565			
Type of check-ups done during ANC visits						
General check-up, including assessing for oedema	154	121	83			
Blood pressure	1,693	2,619	2,994			
Abdominal examination	1,330	2,321	2,282			
Urine test	100	607	404			
Blood test	718	990	870			

Source: Computer Department of CHP, SEWA Rural.²⁸

²⁸ Data were not available for blood tests. Thus, we substituted this with the number of times that the women went for an institutional check-up. In this variable, the blood test is included.

Annexure VII

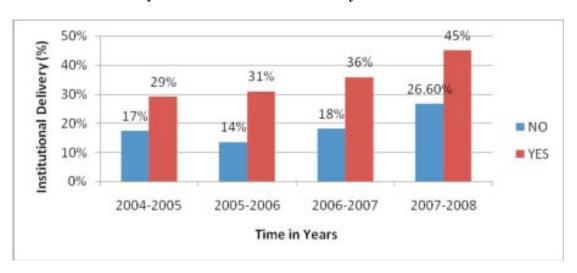
Institutional Delivery versus Ownership of TV



Source: Computer Department of CHP, SEWA Rural.

Annexure VIII

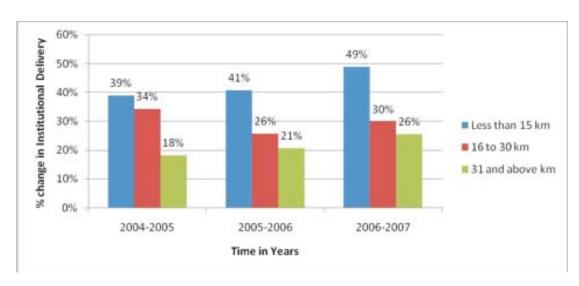
Institutional Delivery versus Provision of Electricity



Source: In-service data of CHP, SEWA Rural.

Annexure IX

Institutional Delivery versus Distance Travelled



Source: In-service data of CHP, SEWA Rural.

Background Note on the Internship Programme

Knowledge Community on Children in India (KCCI) initiative aims to enhance knowledge management and sharing of policies and programmes related to children in India. Conceived as part of KCCI, the objectives of the 2008 Summer Internship Programme were to give young graduate students from across the world an opportunity to gain field-level experience of and exposure to the challenges and issues facing development work in India today.

UNICEF India hosted over 82 interns from India, Australia, Canada, France, Germany, Georgia, Ghana, Italy, Japan, Montenegro, Netherlands New Zealand, Norway, Portugal Spain, Singapore, Sweden, South Korea, Tajikistan, United Kingdom and United States of America to participate in the 2008 Summer Internship Programme. Interns were grouped into teams of four or five and placed in sixteen different research institutions across fourteen states (Andhra Pradesh, Assam, Bihar, Delhi, Gujarat, Jharkhand, Maharashtra, Madhya Pradesh, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal), studying field-level interventions for children from 28 May to 5 August 2008.

Under the supervision of partner research institutions, the interns conducted a combination of desk research and fieldwork, the end result of which were 18 case studies of interventions aimed at promoting the rights of children and their development. The case studies cover key sectors linked to children and development in India, and address important policy issues for children in the country. These include primary education, child survival, health, nutrition water and sanitation, child protection and village planning.

Another unique feature of this programme was the composition of research teams comprising interns with multidisciplinary academic training and multicultural backgrounds. Teams were encouraged to pool their skills and knowledge prior to the fieldwork and devise a work-plan that allowed each team member an equal role in developing the case study. Group work and cooperation were key elements in the production of outputs, and all this is evident in the interesting and multifaceted narratives presented by these case studies on development in India.

The 2008 KCCI Summer Internship Programme culminated in a final workshop, at which all teams of interns presented their case studies for a discussion on broader issues relating to improvements in service delivery for every child in the country. This series of case studies aims to disseminate this research to a wider audience and to provide valuable contributions to KCCI's overall knowledge base.