

# THE KARNATAKA RSBY CASE STUDY REPORT

Health Inc Project

2nd edition

Institute of Public Health Bangalore

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## LIST OF ABBREVIATIONS

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ANM	Auxiliary Nurse Midwife
APL	Above Poverty Line
ASHA	Accredited Social Health Activist
BPL	Below poverty line
FGD	Focus group discussion
GDP	Gross domestic product
GP	<i>Gram panchayat</i>
HDI	Human development index
HIV	Human immunodeficiency virus
HLEG	High level expert group
IDI	In-depth interview
IMR	Infant mortality rate
IPH	Institute of Public Health, Bangalore, Karnataka, India
MGNREGS	Mahatma Gandhi National Rural Employment Guarantee Scheme
MMR	Maternal mortality ratio
NGO	Non-governmental organisation
NRHM	National rural health Mission
NSSO	National Sample Survey Organisation
OBC	Other backward caste
OOP	Out-of-pocket
PHC	Primary health centre
RCH	Reproductive & child health
RSBY	Rashtriya Swasthya Bima Yojana
SC	Scheduled caste
SHP	Social health protection
SPEC	Social, political, economic & cultural
SRS	Sample Registration Survey
ST	Scheduled tribe
TPA	Third party administrator
U5MR	Under-five mortality rate
UHC	Urban health centre
VHSC	Village health and sanitation committee
WHO	World Health Organisation

Recent health financing reforms in low- and middle-income countries aim to introduce affordable prepayment and subsidies for low socio-economic groups. However, while such reforms have led to increased utilization of care, often the poor and informal sectors continue to be excluded from coverage.<sup>1</sup>

Health Inc. put forward the hypothesis that social exclusion is an important cause of the limited success of recent health financing reforms. First, social exclusion can explain barriers to accessing health care due to disrespectful, discriminatory or culturally inappropriate practices at the health services, within the context of poor accessibility and quality of care. Second, social exclusion can explain barriers to accessing the health financing mechanism itself. Differential access to information, bureaucratic processes, complex eligibility rules, etc prevent socially excluded groups from enrolling in financing schemes, even if fully subsidised. Social inclusion, by contrast, may explain why more powerful, wealthy and vocal groups disproportionately 'capture' benefits of publicly funded health care.

In India, there are certain known groups that have historically faced exclusion: the *dalits* and *adivasis* (recognized as Scheduled Castes (SC) and Scheduled Tribes (ST) respectively), religious minorities and women.<sup>2</sup> The proportion of below the poverty line (BPL) families between SC and ST reflect the inequalities entrenched in the Indian society: 37.9% of SC and 43.8% of ST are BPL, whereas in the remaining population only 22.7% are BPL.<sup>3</sup> These differences are further exaggerated when comparing the urban and the rural poor. While the outcomes of these inequalities are often studied, little work has been done to study the processes that lead to them. The larger aim of Health Inc project is to analyse whether different types of financing arrangements overcome social exclusion.

The Institute of Public Health Bangalore is studying the role of social exclusion in India via implementation of the Rashtriya Swasthya Bima Yojana (RSBY) in Karnataka. RSBY is a national health insurance scheme that was launched in India in August 2007. The aim of the scheme is to improve access of BPL families to quality medical care for treatment of diseases involving hospitalisation and surgery through an identified network of healthcare providers.<sup>4</sup> In Karnataka, RSBY was implemented since February 2010 initially in five districts, and then expanded to cover all thirty districts in 2011-12.<sup>4,5</sup> In the first phase of implementation of RSBY, only 46.5% of BPL households were enrolled across the five districts with a decline in its next phase in 2011-12.<sup>4,6,7</sup> Further details are provided in this document to give a clear picture of the challenges faced in implementation of RSBY.

Many theories have been speculated to explain the slow and partial implementation in Karnataka. These hypotheses (detailed in this document) are commonly discussed but most have not been explored to confirm/refute them, to understand how they influence implementation of the scheme, and how they can be remedied if they do. RSBY by design seeks to eliminate the possible economic barriers to accessing health services. However the BPL population is not a homogenous population as mentioned earlier with different religions, castes, political affiliations, etc. Hence the assumption that these barriers will be the same for everyone cannot be held. Health Inc in Karnataka aims to identify and understand these other barriers also and finally help improve access to health services for this population.

The project outputs will include state/country specific and comparative research reports, academic publications and other relevant dissemination materials for all stakeholders. Health Inc. will also disseminate those lessons learnt among local, national, and international public health authorities, researchers, etc. The ultimate outputs expected from the overall project are to develop a conceptual framework for social exclusion that can be adapted to different contexts, and a mechanism to apply it to any social health protection (SHP) programme with the ultimate aim to make these programmes more inclusive in nature.

2.1. COUNTRY PROFILE

The Republic of India is a federation of 28 states and seven union territories, and became independent from British rule on 15<sup>th</sup> August 1947. It covers an area of 32,87,263 sq. km, and is the seventh largest country in the world. The south of the country is a peninsula with the Indian Ocean (south), Bay of Bengal (east) and the Arabian Sea (west); in the north, it is separated from the Asian mainland by the Himalayas.<sup>8</sup> On 26<sup>th</sup> January 1950, India adopted a written Constitution which guarantees six fundamental rights to every citizen including the right to life and personal liberty, equality, and freedom<sup>9</sup>. The Constitution defines the legislative powers of the central and the state Governments through three subject-lists namely, the Union list (on which the centre alone has authority), State list (on which the state government is the sole authority) and the Concurrent list (on which authority is shared by both the centre and the state). The Union List defines and lists subjects such as defence of the country, foreign affairs, citizenship, most taxes and duties on goods and services, population census, insurance and others. The state government has the authority to define laws on police, public health (health services), and agriculture to name a few. Labour welfare, population control, medical education, and regulation of medical professionals are in the Concurrent list as the responsibilities of both the centre and the state.<sup>10</sup>

India has the second largest population in the world with 1.2 billion people as per the recent census, second only to China (1.35 billion in 2011).<sup>11,12</sup> The demographic profile is summarized in the table below:

**Table 1. Key demographic indicators of India**

<b>Population in 2011</b>	1,210,193,422			
<b>Rural-urban distribution</b>	69% rural and 31% urban			
	<b>Total</b>	<b>Rural</b>	<b>Urban</b>	
<b>Sex ratio (adult)</b> (females per 1000 males)	940	947	926	
<b>Sex ratio (0-6 yrs.)</b> (females per 1000 males)	914	919	902	
<b>Literacy rate 7+</b> (Per cent)	Female	69%	59%	80%
	Male	85%	79%	90%
<b>Religions (2001)</b>	81% Hindus 13% Muslim 2% Christian 1.7% Sikhs 2.3% Others			
<b>Social categories (2004-05)</b>	ST 8.6% SC 19.6% OBC 40.9% General 30.8%			

Source: All data from Census 2011<sup>11</sup> except data on religions from Census 2001<sup>13</sup> and social categories' data from National Sample Survey Organisation (NSSO) 60<sup>th</sup> round<sup>5</sup>

The constitution recognizes 22 official Indian languages, of which Hindi is the most widely spoken official language in addition to English (also an official language) and the other major regional languages used in all

official state government correspondence. Agriculture and allied sectors employ 52% of the total workforce, and 64% of the rural population is dependent on agriculture for their livelihood.<sup>8</sup>

## 2.2. STATE PROFILE: KARNATAKA

Karnataka is the eight largest state in India in terms of size, and ninth largest in terms of population. It is considered to be one of the better-developed states in India with respect to human development indicators. More than half of the working population (56%) is employed in the services sector, 27% in industries and the remaining 17% in agriculture. Bangalore, Belgaum, Shimoga and Mysore are among the largest cities in Karnataka. The state also has around fifty indigenous tribes mainly in the southern districts. Kannada is the official language for the state as per the Karnataka Official Language Act 1963. However, many communities also speak other languages like Urdu, Tulu, Konkani, Marathi and others in certain areas.<sup>15,16</sup> The demographic profile of Karnataka is presented in the table below:

**Table 2. Key demographic indicators of Karnataka**

<b>Population in 2011</b>	61,130,704 (61% rural)		
<b>Districts</b> (Sub-divisions/ <i>talukas</i> **)	30 176 <i>talukas</i> (29,340 villages)		
	<b>Total</b>	<b>Rural</b>	<b>Urban</b>
<b>Sex ratio (adult)</b> (females per 1000 males)	968	975	957
<b>Sex ratio (0-6 yrs.)</b> (females per 1000 males)	943	945	941
<b>Literacy rate 7+ (per cent)</b>	60% (rural female 60, urban male 90)		
<b>Religions (2001)</b>	83% Hindus 12% Muslims 3% Christian 2% Others		
<b>Social categories (2004-05)</b>	16.2% SC 6.6% ST		

Source: All data from Census 2011<sup>16</sup> except religions and social categories from Census 2001<sup>17</sup>

\*\**Taluka* or *Tehasil* is an administrative sub-division below the district level and typically each district has two to three *talukas* depending on their population and geography. Generally, a *taluka* consists of a city or town that serves as its headquarters, possibly additional towns, and a number of villages. As an entity of local government, it exercises certain fiscal and administrative power over the villages and municipalities within its jurisdiction

## 2.3. THE INDIAN HEALTH SYSTEM OVERVIEW

The Indian health system has evolved significantly post-independence in India. Today the government health sector is organized in a three-tier structure providing promotive, preventive and curative health services at different levels, along with National Health Programmes that focus on priority diseases/conditions like Tuberculosis, HIV, and others. India also has a widespread and heterogeneous private health sector that provides mainly curative services at all levels.<sup>18</sup> Key milestones in health are summarized in the box below:<sup>19</sup>

**Figure 1. Key milestones that shaped the Indian health system**

<b>1947</b>	<b>Acceptance of the Bhore Committee Report</b>
<b>1978</b>	<b>Acceptance of the Alma Ata declaration of 'Health for all'</b>
<b>1983</b>	<b>The first National Health Policy</b>

<b>2002</b>	<b>The new National Health Policy and the National Population Policy</b>
<b>2005</b>	<b>Launch of the National Rural Health Mission (NRHM)</b>
<b>2008</b>	<b>Launch of the Rashtriya Swasthya Bima Yojana (RSBY)</b>
<b>2011</b>	<b>Presentation of the HLEG report to the Planning Commission on Universal Health Coverage (UHC)</b>

Although not explicitly recognised as a right, health and healthcare are subsumed under the right to life and liberty as interpreted several times by India’s judiciary.<sup>9</sup> The healthcare provision is also mixed; the private sector is the more dominant provider of several out-patient and inpatient care services, while immunisation and several preventive health services are still largely provided by the government services leading to a lack of integrated care with several quality issues both in the private and public sectors.

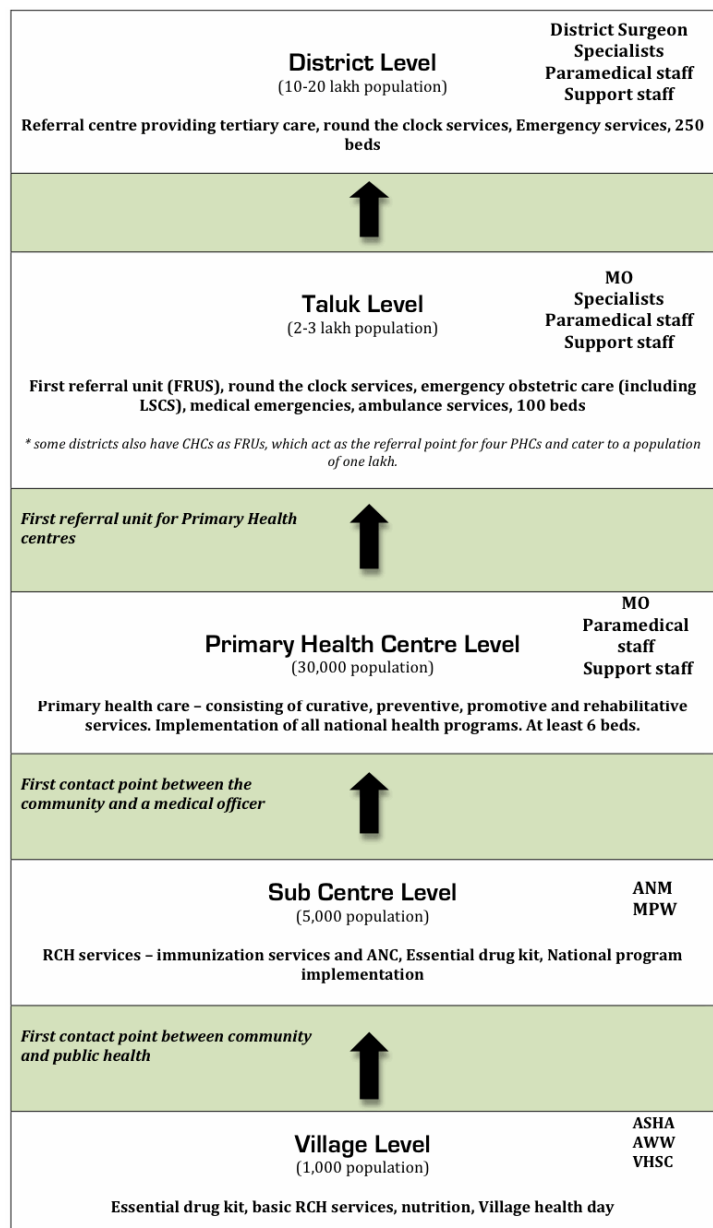
## PUBLIC HEALTH SERVICES

The public rural health services have a three-tier structure comprising of primary, secondary and tertiary health care facilities. The primary tier consists of a sub-centre (the most peripheral institution with a nurse-midwife), a primary health centre (the first line of health services headed by a medical officer, a doctor) and a Community health centre (First Referral Unit). The second tier refers mainly to the some *taluka* (sub-district) and district hospitals that provide secondary level of services while the third tier consists of tertiary level of services with super-specialisations and sophisticated diagnostic facilities. In Karnataka, *taluka* hospitals replace the community health centres as the first referral units, and cater to the population of one sub-district (150,000 to 300,000). This structure has been illustrated in the diagram.

At the district level, a district health office led by a district health officer and supported by a team of programme offices for the disease control programmes for tuberculosis, reproductive and child health, and others. They mainly oversee the public health programmes implemented in the district along with performance of the sub-centres and PHCs. Apart from the health department, departments of medical education (for tertiary medical college hospitals) and the department of women and children welfare also play crucial roles in supporting the services provided.<sup>18</sup>

In 2005, the Indian government implemented the National Rural Health Mission (NRHM) seeking to increase government’s expenditure on health, trying to bring about a greater community participation, decentralization

**Figure 2. Structure of rural public health services**



**ANC:** Ante Natal Care  
**ANM:** Auxillary Nurse Midwife  
**ASHA:** Accredited Social Health Activist  
**AWW:** Anganwadi Worker  
**CHC:** Community Health Centre  
**FRU:** First Referral Unit  
**LSCS:** Lower Segment Caesarian Section  
**MO:** Medical Officer  
**MPW:** Multi Purpose Worker  
**RCH:** Reproductive and Child Health  
**VHSC:** Village Health and Sanitation Committee

Source: Institute of Public Health, Bangalore

and several financing changes, human resource inputs and other arrangements. The NRHM aimed at improving community participation through new and innovative mechanisms like provision of a female Accredited Social Health Activist (ASHA), creation of a Village Health and Sanitation Committee (VHSC), introduction of Indian public health standards, introduction of health programme managers, and decentralization of district health management. It also sought to integrate the vertical health programmes by covering maternal health for pregnant women, as well as immunization for children against diphtheria, pertussis, tetanus, polio, measles, tuberculosis and Hepatitis B, etc. Early evaluations of this nationwide programme are reporting mixed results including improved utilization of services in some places. However, the quality issues remain.<sup>20</sup>

In the urban areas, the government health services are not as well organized. They are primarily the responsibility of local municipalities and corporations. They usually have a two-tiered system with urban health centres (UHC) and a referral maternity centre. Bangalore urban is one of few corporations to offer its own referral hospitals, and the only city in Karnataka to do so. In Bangalore urban, there are a total of 48 UHCs, 23 maternity centres and six referral hospitals. The infrastructure ratio, therefore, is 1 UHC for 140,000 individuals and a bed-population ratio of 1 bed for 9,500 populations. Unlike the rural services, these facilities are intended to only cater to the poorer sections, do not have a uniform distribution or population coverage.<sup>21</sup>

## PRIVATE SERVICES

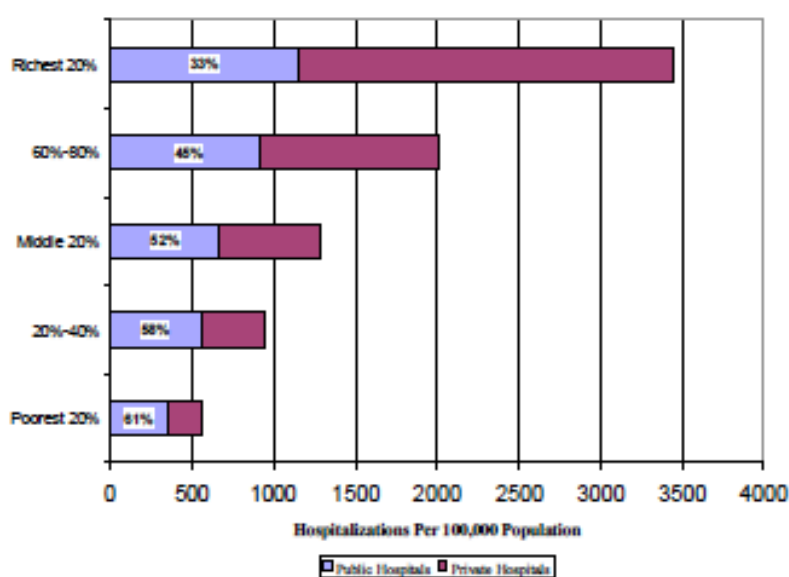
The private health sector in India is the most dominant sector in terms of financing and utilization of health services (explained below). The private sector in turn, consists of the 'not-for-profit' and the 'for-profit' health sectors. Health services provided by various non-government organisations (NGO), charitable institutions, missions and trusts constitute the not-for-profit sector. The private sector mainly provides curative services and dominates in fields of medical education, high-end medical technology and diagnostics, pharmaceutical industry, and providing quality health care. The private health care provides 79% of outpatient care for those below poverty line much of which is of low quality and the payment is primarily out of pocket.<sup>22</sup> The private providers are a heterogeneous group ranging from informal local practitioners to corporate tertiary hospitals. Regulation of private providers is also poor.<sup>18</sup>

## UTILISATION OF SERVICES

Conceived to be universal in nature, the public health services today mainly cater to the relatively poorer sections of the society; the poorest of the poor and several socio-economic groups such as tribal people, dalits and religious minorities continue to be excluded from many of the services either due to physical, financial or other reasons. The dependence and dominance of either sector varies across the different type of services.

Outpatient curative care is dominated by the private sector with more than 80 per cent of all visits taking place in the private sector. Hospitalizations and institutional deliveries are shared almost equally between the public and private sectors. The role of the public sector, however, is stronger for preventive services with 60 per cent of antenatal visits and 90 per cent of immunization doses delivered by the public sector. These findings are similar by income group, for urban and

**Figure 3. Public and private sector hospitalisation rates by income quintile**



Source: Mahal 2001<sup>23</sup>

rural populations, by gender, by caste and tribe affiliation, and above and below the poverty line. The utilization pattern also varies by income quintiles. There is a strong reliance of the poor on public hospitals as measured by the share of the public sector for hospitalizations. Sixty one per cent of hospitalizations in the poorest quintiles take place in public hospitals while the richest quintile used public hospitals only 33 per cent of the time.<sup>23</sup>

## HEALTH OUTCOMES

Despite all the efforts in reforming policies and improving the health services, India has not fared very well in terms of key health indicators and universal health coverage when compared to China, Thailand and other lower middle-income countries.

**Figure 4. Comparison of key health indicators of India with China, Chile, Brazil & Thailand**

Indicators	China		Chile		Brazil		Thailand		India	
	UHC expected in 2011		UHC since 1981		UHC introduced 1988		UHC since 2001		2001	2009
	2001	2009	2001	2009	2001	2009	2001	2009	2001	2009
Population	1.27 billion	1.33 billion	15.6 million	16.8 million	176 million	193 million	62.9 million	66.7 million	1.03 billion	1.17 billion
Birth rate	13	14	16	15	20	16	16	12.95	25	22
Death rate	6	7	5	5	6	6	8	9	8	7
Infant mortality rate per 1,000	22 (2005)	17	8 (2005)	7	22 (2005)	17	14 (2005)	12	57 (2005)	50
Under-5 mortality rate per 1,000	25 (2005)	19	9 (2005)	9	26 (2005)	21	16 (2005)	14	77 (2005)	66
Maternal mortality ratio (adjusted) per 100,000 live births	44 (2005)	38	26 (2005)	26	64 (2005)	58	51 (2005)	48	280 (2005)	230

Source: High Level Expert Group (HLEG) Report 2011<sup>24</sup>

In India, the key health indicators have improved significantly over the time reflecting improvement in health status of its citizens. However as seen in the figure below the progress has been slow and not at par with expectations. For instance, serial surveys showed that the Maternal Mortality Ratio (MMR) has reduced from 254 per 100,000 live births in 2004-06 to 212 per 100,000 live births in 2007-09 a reduction of 42 points over a three-year period or 14 points per year on an average but still this remains the highest number of maternal deaths in the world. A trend of increasing burden of non-communicable diseases, persisting burden of communicable diseases, high childhood malnutrition rates, and a high child and maternal mortality highlight the need for further reforms in the health system.<sup>18</sup>

Similar to other southern states, Karnataka's performance has been noted to be better than average when compared to the rest of India, and serial national surveys showed significant improvements in key health indicators as well.<sup>25,26</sup> However its performance when compared to other southern states leaves room for much improvement still. A few key health indicators have been presented in the table below:

**Table 3. Key health indicators of Karnataka compared to the national averages (2005-06)**

Health indicators	Karnataka	India
Proportion of institutional deliveries in last five years	65%	39%
Proportion of full immunisation coverage in last five years	55%	44%
Proportion of children under five with anaemia	70%	
Proportion of women with anaemia	52%	
Infant mortality rate (deaths per 1000 live births)	43	57
Maternal mortality ratio (deaths per 100,000 live births) 2009	178	212
Prevalence of Tuberculosis among men (per 100,000 population)	168	

Source: National family health survey (NFHS) 3 in Karnataka<sup>25</sup> & India<sup>27</sup>  
except MMR data from Sample registration survey (SRS) 2009<sup>28</sup>

## 2.4. SOCIAL EXCLUSION AND HEALTH

Social exclusion, being a multi-dimensional phenomenon, can be viewed from various 'lens'. In this document, we adopt the elements from a social, political, economic & cultural (SPEC) analysis of international literature on social exclusion. We used the themes that emerged from this analysis to present and discuss the specific SPEC context of India and Karnataka. These four dimensions are not isolated compartments and more often than not, vulnerable individuals/communities face multiple levels of SPEC exclusion. For instance, a tribal woman in North Karnataka may be excluded from utilizing health services due to her gender, her tribal status, geographical isolation (as most tribes reside in hills and forests), her geographical location (rural area, northern part of the state), and/or their implications on her education, occupation and health. Hence, in this section, social exclusion is viewed through the SPEC lens but still discussed comprehensively. These elements will further guide the analysis of the data and eventually help frame the recommendations made.

### **Excerpt from Annual report to the people on health by the government of India 2011<sup>18</sup>**

*Social determinants of health are the economic and social conditions under which people live which determine their health. They are "societal risk conditions", rather than individual risk factors that either increase or decrease the risk for a disease. For example, marginalisation and discrimination on account of gender and caste are social determinants themselves. It is, therefore, not surprising that the poor performing states are those with the highest levels of poverty and the highest levels of malnutrition, among children and adult women. Female literacy rates, School enrolment rates, and rates of households with safe drinking water and sanitation are all distinctly lower.*

India society is stratified into various caste groups. The caste system results in a systematic discrimination of the several so-called "lower castes". The Indian constitution has made provision for affirmative action which has led to statutory lists of so-called scheduled castes (SC; accounting for about 16% of India's population in 2001 and similar proportion in Karnataka as well) and scheduled tribes (ST; accounting for 8.2% of the Indian population in 2001; 6.6% in Karnataka), which are caste groups identified by the State for reservation in jobs and educational opportunities. Together, these scheduled castes and tribes account for one-fourth of India's population. In spite of these efforts, evidence shows that these groups do not yet enjoy equal opportunities or access to various schemes, resources and public services. Even within these groups, the higher socio-economic categories among them tend to benefit more than the poor.<sup>15,29</sup> The main problems faced by both these vulnerable groups are landlessness, indebtedness, illiteracy, unemployment, lack of proper housing, and discrimination despite six decades of affirmative action, targeted programs and strong laws.<sup>15, 29</sup>

**Table 4. Comparisons of SC, ST & general population profiles 2001\$**

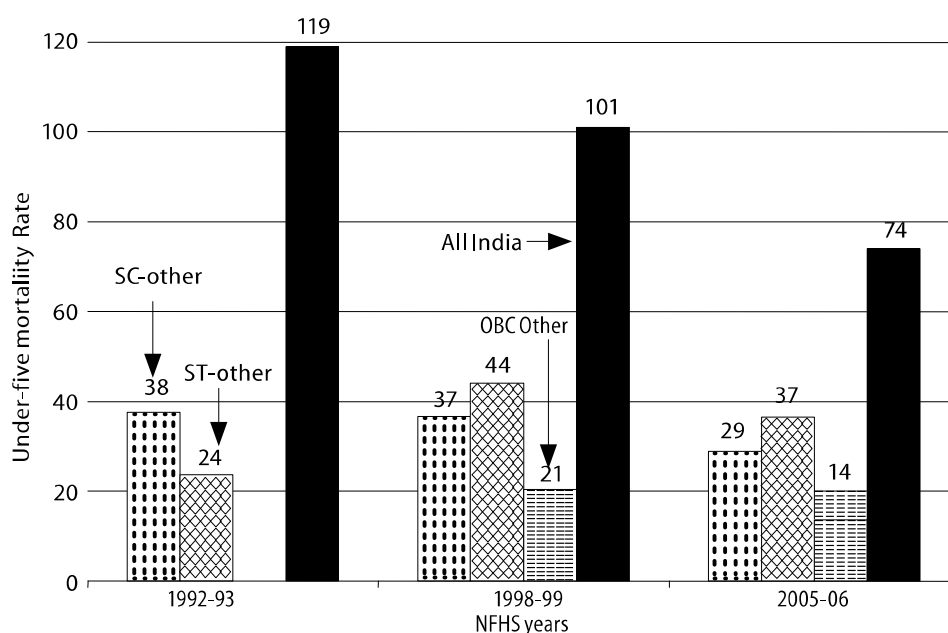
Indicators		General		SC		ST	
Population proportion		75.6%		16.2%		8.2%	
Effective literacy rate by gender		Female	Male	Female	Male	Female	Male
		58.1%	78.7%	41.9%	66.6%	34.8%	59.1%
Type of economic activity	Agricultural labourers	20.7%		45.6%		36.9%	
	Cultivators	32.5%		20.0%		44.7%	
	Other workers	46.8%		34.4%		18.4%	
Access to electricity		61.4%		44.3%		36.5%	

\$ The figures exclude Mao-Maram, Paomata and Purul sub-divisions of Senapati district of Manipur  
 Source: The first two rows are informed by Census 2001<sup>13</sup> & the remaining rows by the Planning Commission report 2005<sup>29</sup>

In the case of ST, the additional problem of geographical isolation plays a significant part in their exclusion. Most ST communities in Karnataka are indigenous forest-dwelling tribes. They live in small settlements ranging from just a few families to about 50-100 households in a given area, in and around forests and often in hilly areas. Their interaction with the “others” from the plains is limited to occasional commerce. They often do not have good road access and hence are relatively isolated from health services, education and other public services. These issues are compounded by lack of stable livelihood opportunities. There are fifty forest-dwelling tribal groups in Karnataka such as Soligas, Kurubas, Siddis and several others.<sup>15,29</sup>

In healthcare, these inequities mean that these socially disadvantaged groups could suffer from poor access and utilization. In view of their disadvantaged position within society, even in areas/villages where physical access to health services exists, other cultural barriers may prevent them from accessing these services.<sup>15,29,30</sup> An article looked at the mortality among children younger than five years i.e. the under-five mortality rate (U5MR) as an indicator to explain these inequities. While the average Indian U5MR decreased significantly by more than 25 per cent between 1998-2006 a period of economic growth, the underlying societal inequities did not allow a similar outcome in the U5MR for the socially disadvantaged groups as reflected in the figure below.<sup>31</sup>

**Figure 5. Social gap in Under-five mortality for three periods 1992-3\*, 1998-99 and 2005-06**

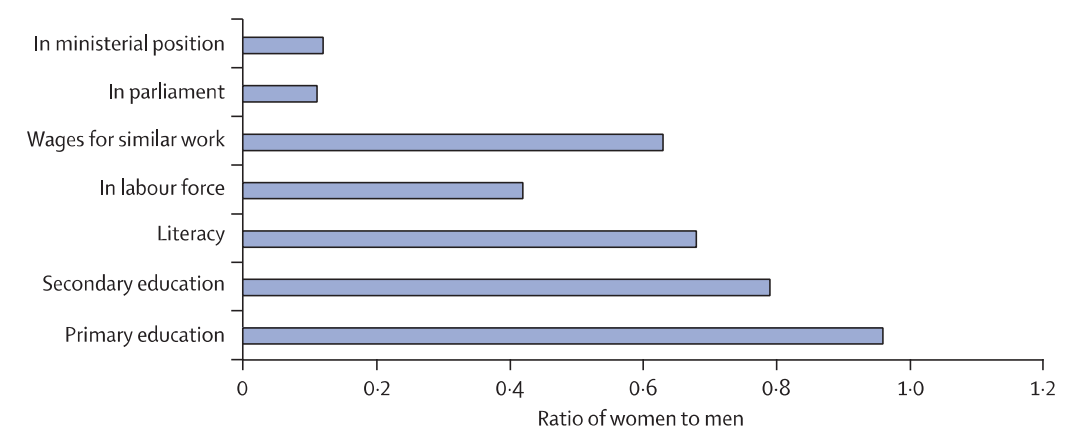


\* 1992-93 NFHS round did not collect data separately for OBCs, and those who were not SC, ST or OBC. Source: Baru 2010<sup>31</sup>

Although Hinduism is the dominant religion followed in India, it has significant populations of four major religions of the world. India has the third largest population of Muslims in the world and is also the land of origin of three other major religions namely, Buddhism, Jainism and Sikhism. When disaggregated into socio-religious categories, variations are seen across these groups. For instance Muslims were noted to have the second highest child survival rate, second only to other minority religious groups. On the other hand, access to basic amenities like electricity, toilet facilities, safe water, etc is found to be lower among Muslims over the years but still higher than that of both SCs/STs and OBCs. <sup>32</sup>

In 2010, India was ranked 112 out of 134 countries in terms of gender inequity making it one of the lowest ranked nations among lower middle-income countries. It was found to lag significantly behind in health (132/134), education (120/134) and economic participation (128/134) of women but did well in terms of political empowerment of women (23/134). This has been further simplified in the figure shown below. <sup>34</sup>

**Figure 6. Female to male ratios in education and literacy, labour participation and wages for similar work, and political positioning in India (2006-10)**



Source: Raj A 2011<sup>33</sup> based on the global gender-gap report 2010<sup>34</sup>

The position of women in Indian society in turn acts as a barrier to accessing health and other basic services, and results in poorer health outcomes when compared to Indian males as seen in the different figures presented in this section. While Karnataka ranks sixth among the major states in India in gender development, the picture is similar with adverse sex ratio, wage differentials, lower literacy rates, and worse health outcomes. <sup>15,14</sup> A few studies in Karnataka show that the gender disparities cut across socioeconomic class, caste, economic participation and health seeking behaviour. The public health services in Karnataka are impaired by not being gender responsive, and health workers including health professionals often also reflect the systematic gender bias that exists in society. This implies that mere physical and financial access to quality health services would still not lead to gender sensitive services. <sup>35-37</sup>

Inequalities related to urban-rural are also quite prominent in all sectors including health only compounding to the disparities created by other factors mentioned above. While the rural public health services is undergoing significant reforms as explained earlier and covers the entire rural population, the urban public health services are found to be wanting in terms of their infrastructure and functioning, and target the poor sections only. A significant proportion of the available resources are more often than not directed towards urban-based and curative services that reflect an urban bias in access to health services. The globalization has led to rapidly expanding cities and private sector that have resulted in poorly planned and unequal geographical distribution of health services.<sup>38</sup> The decadal growth of most health indicators reflect an overall better state of health in urban areas when compared to rural areas as shown in the table below, however a lower sex ratio, increasing migrant population, and widening gap in wealth indices have also been note.

**Table 5. Rural-urban divide for Karnataka and India 2011**

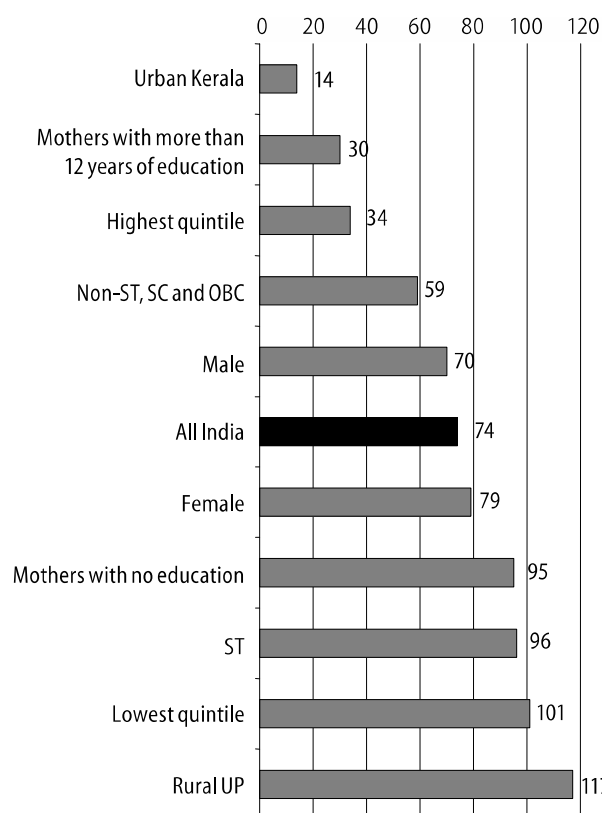
Indicator	Karnataka (Percentage)		India (Percentage)	
	Rural	Urban	Rural	Urban
Proportion of population	61.4	38.6	68.8	31.1
Decadal growth rate (2001-11)	7.6	31.2	12.2	31.8
Literacy rate	Male	77.9	78.6	89.7
	Female	59.6	81.7	65.5
Sex ratio (females per 1000 males)	975	957	947	926
Infant mortality rate (2010)	43	28	51	31
Proportion of safe deliveries (2007-08)	66.7	84.7	43.6	75.9
Highest wealth quintile (2007-08)	7.2	44	9.9	55.3

Source: All data from Census 2011 for Karnataka<sup>16</sup> and India<sup>11</sup> except IMR from SRS report 2010<sup>39</sup> and last two rows from District level household surveys (DLHS) 3 for Karnataka<sup>40</sup> and India<sup>41</sup>

Regional inequalities in India are also well known. Several regions in the country significantly lag behind other areas in health and development indicators. For example SRS 2007-09 shows the Maternal Mortality Ratio (MMR) in Kerala is 81 deaths per 100,000 live births compared to that of Assam of 390 per 100,000 live births, five times higher.<sup>28</sup> Earlier, some of these states were designated by the short-form BIMAROU (BIMAR means “ill” in Hindi. It stands for the states of Bihar, Madhya Pradesh, Rajasthan, Orissa, and Uttar Pradesh) based on their negative effect on the country’s national gross domestic product (GDP). This term has now been rightly abandoned with a new term, Empowered Action Group (EAG) group of states identified for the purposes of prioritization of health and development projects. For example, the NRHM programme implemented the full complement of NRHM on priority in these states, while leaving several features optional for the other states.<sup>20</sup> In spite of these efforts however, the EAG states lag behind significantly. For example, there are inter-state, male-female and rural-urban differences in life expectancy at birth due to low literacy, differential income levels and socio-economic

conditions and beliefs. In Kerala, a person at birth is expected to live for 74 years while in states like Bihar, Assam, Madhya Pradesh, Uttar Pradesh, etc the expectancy is in the range of 58-61 years.<sup>18,31</sup>

Within Karnataka also these inequalities manifest in the form of a gross disparity in development indicators. Most of the economic development, roads, infrastructure and public services have concentrated on southern Karnataka resulting in a neglect of northern regions. Raichur in the north has the lowest human development index (HDI) of 0.547 while Bangalore Urban in the south stands the highest at 0.753.<sup>15,30</sup> Similarly, several health related input and outcome indicators vary within the state. Within Karnataka for instance in 2007, the proportion of women who received full antenatal check-up is 92 per cent in Bangalore, while 16.7 per cent in Koppal.<sup>40</sup> In 2011, the population per PHC in Tumkur (southern Karnataka) is 1 PHC per 19,027 population



**Figure 7. Inequities in U5MR in India in 2006**

Source: Baru R 2010<sup>31</sup> based on NFHS 3 data<sup>27</sup>

while it is 1 PHC per 41,842 population in Raichur.<sup>42</sup> In spite of a few chief ministers from north Karnataka leading the state, the political neglect of north Karnataka continued. Recently, a high-power committee established by the government of Karnataka made a comprehensive assessment of the regional inequality and emphasized on the need to go down to the *taluka* level while identifying priority (backward) *talukas*. They identified 35 indicators encompassing agriculture, industry, social and economic infrastructure and population characteristics to measure and prepare an index of development. The committee went beyond the district as an administrative unit, to focus on intra-district disparities. The report highlighted the disparities within districts across the various sectors and recommended focus to be shifted from districts to blocks or *talukas*.<sup>30</sup> Other political measures to prioritise development of north Karnataka include the establishment of an alternate legislature in Belgaum in north Karnataka.

## 2.5. HEALTH FINANCING IN INDIA

Despite the growth in health related infrastructure and increase in resource utilisation to improve health services, health remains a low priority for the Government with allocation for health being around 1% GDP.

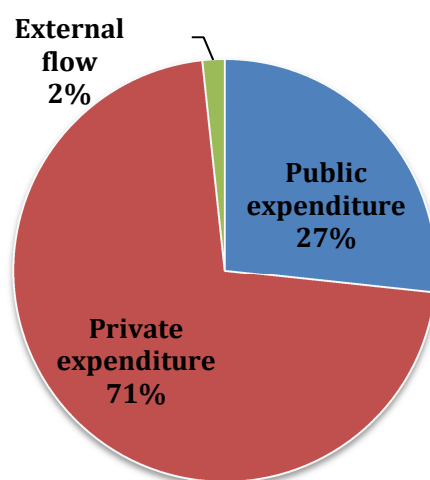
**Table 6. Low priority in public spending on health - India and comparator countries 2009**

	Total public spending as % GDP (fiscal capacity)	Public spending on health as % of total public spending	Public spending on health as % of GDP
India	33.6	4.1	1.4
Sri Lanka	24.5	7.3	1.8
China	22.3	10.3	2.3
Thailand	23.3	14.0	3.3

Source: HLEG 2011<sup>24</sup>

In India, the central, state and local governments together contribute only 27% of the total health expenditure while individual households contribute 72% through out-of-pocket (OOP) expenditure at the time of illness.<sup>22</sup> This high level of OOP expenditure by individual households is one of the highest amongst low and middle-income countries.

**Figure 8. Distribution of health expenditure based on source 2008-09**



Source: National health profile of India 2011<sup>43</sup>

It is the rural households that account for 62 per cent of the total OOP expenditure borne by households.<sup>18,22</sup> A study has shown that 2-3% of the population is impoverished every year due to the health related expenditure,

termed as 'iatrogenic poverty' by some. <sup>44,45</sup> With the launch of the NRHM in 2005, the government aimed to increase the share of GDP spent on health from 0.9% to 3%. <sup>20</sup> Apart from increasing resource allocation, the central and different state governments have initiated health insurance programmes to provide social protection like the Universal Health Insurance Scheme by the Ministry of Finance, Rashtriya Swasthya Bima Yojana by the Ministry of Labour & Employment (explained later), Rajiv Arogyashri Yojana by the state government in Andhra Pradesh, etc.

In Karnataka, the picture is quite similar with the government spending 28% of the total health expenditure based on the State Health Accounts 2004-05.<sup>26</sup> The budgetary allocation on health stood at 3.4% in 2008-09, a decrease from 5.1% in 2000-01. <sup>46,47</sup> With high OOP expenditure and the risk of impoverishment, financial protection was a priority and the government introduced various demand side financing schemes listed below for vulnerable sections of society.

**Table 7 .Important government health protection/insurance schemes in Karnataka**

<b>Scheme</b>	<b>Organizer/ownership</b>	<b>Government</b>	<b>Year launched</b>	<b>Target population</b>
Vajpayee Arogyashri Yojana	Department of Health & Family Welfare	State	2009	All BPL households (state)
Health Insurance for Women in Sericulture	Central Silk Board, Ministry of Textiles	Central	2009	Women Sericulture workers
Rashtriya Swatha Bima Yojana	Ministry of Labour & Employment	Central	2008	All BPL (central) and MGNREGS households
Yeshasvini health insurance scheme	Department of Cooperatives	State	2005	Farmers attached to cooperative societies
Universal Health Insurance Scheme	Ministry of Finance	Central	2005	Members of some cooperative & their dependents
Health insurance scheme for handloom weavers	Department of Handlooms, Ministry of Textiles	Central	2005	Weavers with Handloom Cooperatives
Mahatma Gandhi Bunkar Bima Yojna	Department of Handlooms, Ministry of Textiles	Central	2005	Weavers with Handloom Cooperatives
Central Government Health Scheme	Ministry of Health & Family Welfare	Central	1976	All employees of central government pensioners
Employee State Insurance Scheme	Ministry of Labour & Employment	Central	1948 - 1957	All employees of the government earning up to Rs. 7,500 per months

Source: CBPS 2011<sup>47</sup>

All the schemes target a section of the population determined by the department or ministry that launched the scheme, and offer different packages of benefits. While some groups may overlap like farmers and BPL households, there are sections that are still not covered. Apart from these, a few not-for profit and for profit institutions have also launched small-scale schemes or community based health insurances. Despite launch of these schemes and reforms introduced by NRHM, a gap in coverage of the population for both outpatient and inpatient care remains in the state with lower rates of hospitalisation in the poorer sections. The need for systemic reforms like improvement in access to medicines, increase in financial incentives to health workers, and better infrastructure have been noted by the state and are current areas of focus for the government. <sup>26</sup>

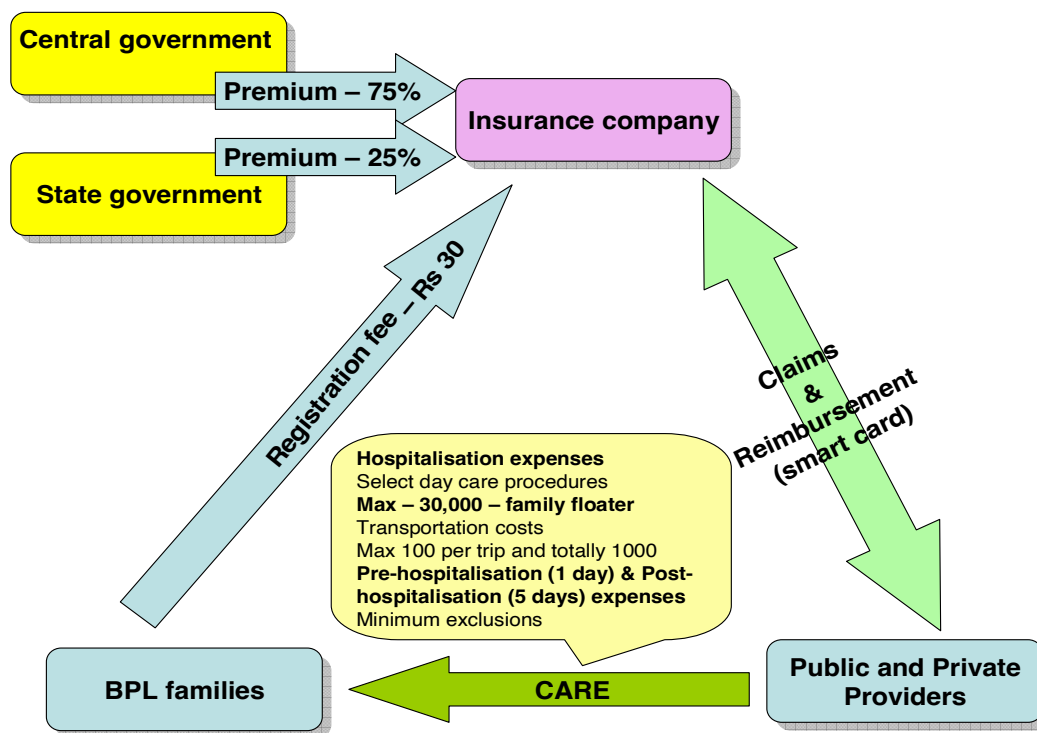
## 2.6. RASHTRIYA SWASTHYA BIMA YOJANA

The Ministry of Labour and Employment, Government of India launched Rashtriya Swasthya Bima Yojana (RSBY), a national health insurance for Below Poverty Line (BPL) families in 2007. RSBY started rolling from 1st

April 2008. The aim of the scheme is to improve access of BPL families to quality medical care for treatment of diseases involving hospitalisation and surgery through an identified network of healthcare providers. <sup>48</sup>

**Design:** This scheme is strongly subsidised with public funds shared between Central and State governments (75% of the premium is paid by the Central government and 25% by the State government). A nominal yearly adherence fee of Rs.30 per five-membered family is paid. A summary of the design of RSBY is provided in the figure below.

Figure 9. Diagrammatic representation of the RSBY scheme



Source: Devadasan N 2008<sup>49</sup>

**Actors and their role in the scheme:**<sup>48,50</sup>

- **Beneficiaries:** The scheme from central government was targeted for BPL population alone. But each state government expanded its coverage to other occupational groups in phased manner like: construction workers, domestic workers, auto-rickshaw drivers, etc. This expansion or inclusion of other groups has not been uniform across the country. Beneficiaries are expected to enrol in the scheme for a year, receive a smart card, and then use the benefits when hospitalized in empaneled hospitals. Only five members in the family are eligible to enrol for the scheme.
- **Non-governmental organizations (NGO):** NGOs are expected to create awareness among the community especially; the eligible groups about RSBY and mobilize them for enrolment.
- **Insurance Companies** (both private and public sector companies): The companies compete with each other for covering the eligible families in each state. The company with the lowest bid gets the contract for implementing the scheme in that specific State. Once selected, the company has to appoint smart card agencies, work closely with the State government's Nodal Agency to identify the eligible households, empanel hospitals and contract NGOs to create awareness in the community.
- **Third Party administrators (TPA):** These are private agencies that help the Insurance Company in implementing the scheme in the field level.
- **Smart Card Providers.** They provide the technology for this scheme.
- **Empaneled hospitals (both public and private):** Once empaneled by the Insurance Company, they provide the necessary services to the RSBY beneficiaries. Their services are reimbursed by the Insurance Company via TPAs or directly.

- **State Nodal Agency:** It is an independent body formed by the government that acts as the focal point for governing the programme. In most States, it is led by the Department of Labour and Employment while in some it is the Department of Health & Family Welfare. It initiates the process of introducing the scheme in the State, negotiates with the insurance company and monitors the enrolment and the utilization. The State contributes 25% of the premium through this agency.
- **Central government:** The Ministry of Labour and Employment launched the scheme and its main responsibility is to develop technical and administrative guidelines and market the scheme to the State governments. The Central government contributes 75% of the premium to the Insurance Company.

### Implementation status in India

As of December 2012, in India the scheme is functioning in twenty-six states and union territories covering 439 districts. Around 33.2 million households have been enrolled across the country with more than 12,500 hospitals have been empaneled in the scheme while 4.3 million hospitalisations have been recorded.<sup>6,51</sup> The enrolment rate for 2011-12 based on the official figures stood at 51.4% average varying greatly across states. Many studies have been conducted looking at the implementation of the scheme in a specific region/state. Issues have been identified mainly with two main steps namely, enrolment and utilisation.

Lack of awareness was most cited as an important reason for poor enrolment. The rates were also found in most studies to vary greatly across villages, districts, regions and demographic groups.<sup>5,52-54</sup> It was seen that often only few members enrol in small sized households (five or less) despite the scheme allowing cover for all.<sup>52</sup> As per the scheme guidelines, the smartcard should be issued at the time of enrolment and households can use them immediately. However studies show that this often does not happen and the card is issued later or not at all excluding an enrolled household from using benefits. In a study in Chhattisgarh, only 4% households received the cards at the time of registration.<sup>56</sup>

Coming to utilisation of the scheme, the hospitalisation rate was found to average 2.6%, ranging from 0.08% to 5.2%.<sup>55</sup> This hospitalisation rate is well above the estimated national rates and suggests that the RSBY may have improved access to hospital care in some regions or states of India.<sup>14,55</sup> A study found that the strategy of information, education and communication campaign did not impact the enrolment significantly but did influence the utilisation rates among those already enrolled.<sup>54</sup> Utilisation patterns are shown to be significantly higher among women and the pattern varies mainly across villages and not across households.<sup>57,58</sup> Utilisation rate has also been found in some cases to depend on the insurer, provision of information regarding empaneled hospitals during enrolment, access to transport, etc. According to a study in Delhi, OOP expenditure was found to accompany utilisation in a third of patients, while two-thirds were prescribed medicines for purchase in spite of the RSBY. Similar findings are starting to emerge in other studies as well.<sup>58,59</sup>

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### RSBY IN KARNATAKA

In Karnataka, RSBY was implemented from early 2010 and is administrated by the Department of Labour, while at the district level it is the responsibility of a committee under the Deputy Commissioner. RSBY has taken off in many states over the years, and in Karnataka the scheme is at the end of its second year. In 2010 RSBY was rolled out in the rural area of 5 districts in Karnataka namely, Mysore, Bangalore Rural, Shimoga, Belgaum, and Dakshina Kannada. In 2011-2012, the scheme was expanded to include the urban sections and to cover all thirty districts.<sup>4,51</sup>

### The Karnataka RSBY list for 2011-12

In India, the centre and the states set the BPL line at different levels. The central RDPR (Rural Development and Panchayat Raj) list of BPL in Karnataka is based on the survey conducted in 2002. This list was based on the definition set by the Planning Commission of India. Many states including Karnataka have a different list of BPL households identified by the Department of Food and Civil Supplies who provide the households with ration cards that also act as BPL cards. The state list includes a higher proportion of the population when compared to the RDPR list. However only those on the central RDPR BPL list have been deemed eligible for RSBY in Karnataka. Initially the scheme targeted the BPL families alone, but in 2011-12, the Karnataka government

expanded the coverage to include families registered under the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGS) along with BPL families. MGNREGS is an Indian job guarantee scheme, enacted by the legislation on August 25, 2005. The scheme provides a legal guarantee for one hundred days of employment in a financial year to adult members of any rural household willing to do public work related unskilled manual work.<sup>60</sup> Families enrolled under MGNREGS include both above poverty line (APL) and BPL families in rural areas. This created an overlap of families who were both BPL and enrolled for MGNREGS. To avoid duplication, the Department of Labour compared both lists and the names of families that appeared in both lists were removed from BPL list and then the final RSBY beneficiary list was created.<sup>5,51,61</sup>

**Table 8. RSBY implementation in Karnataka since 2010**

Policy year	Year 1	Year 2
No. of districts	5	30
Geographical area covered	Rural only	Both rural and urban
Eligible households	BPL households	BPL and MGNREGS beneficiaries
No. of eligible households	338,931	4,076,642
Enrolment rate	46.4%	41.2%
No. of hospitals empaneled	Public	318
	Private	478

Source: Karnataka status on RSBY website<sup>4</sup>

RSBY is currently in its second year of policy but a few studies have already explored its implementation till date. A survey done in the first year showed that 85% of the eligible population was aware of the scheme while 17% of those who were aware of the scheme had not enrolled. The main reasons stipulated were no prior information of the registration camp, being away on work or in the fields, problematic BPL list, etc.<sup>5</sup> Similar to findings from other regions, the study in Karnataka also showed that the cards were often not issued on the spot for many reasons like failure of computer, or electricity, other technical issues, etc. This meant that not all enrolled households received smart cards and they were excluded from the benefit at this level. The survey revealed that 38% of the households did not receive their smart cards even after six months. Regarding utilisation, one study noted that 23 per cent of empaneled hospitals did not treat any patient under the scheme while 80 per cent of the hospitals were empaneled only after enrolment of the households.<sup>5</sup>

A few studies showed interesting patterns of enrolment within the household as well. RSBY allows five members from each household to be covered by the scheme. It was seen that when the enrolment among females was low overall, and when the limit on coverage was binding, sons were more likely to get enrolled than daughters.<sup>52,57</sup> This has raised the question on possible exclusion of vulnerable individuals within households that no study has yet looked at.

## 2.7. RESEARCH OBJECTIVES & QUESTIONS

The goal of this research is to support development of more inclusive health financing reforms by the government. The objective of the research is to study social exclusion in Karnataka State, India with the following principles as presented in the box below.

### Major principles of Health Inc research

1. The main research focus is on understanding how social exclusion impedes access to health services despite health financing reforms, and how social health protection (SHP) can become more inclusive;
2. To develop a conceptual framework on the social, political, economic and cultural dimensions of social exclusion in each context;

3. Both quantitative and qualitative methods of research will be adopted to study the process of social exclusion and understand how it impedes health financing reforms;
4. The research methodology will have a common skeleton to allow comparability but will be flexible and will be adapted by each partner for their context;
5. An optimal balance will be explored between study results being context-specific but also comparable across all four study sites;
6. The ultimate goals of research is to develop a conceptual framework for social exclusion that can be adapted to different contexts and a mechanism to apply it to any SHP programme; and to inform policy to make the SHP programmes more inclusive in nature and thereby, strengthen the social health protection in the country.

## HEALTH INC RESEARCH QUESTIONS

The overall research will be based on a set of research questions that is bounded by a shared understanding of concepts of social exclusion and inclusion. The common research questions for the consortium are presented in the box below.

### Overall research questions

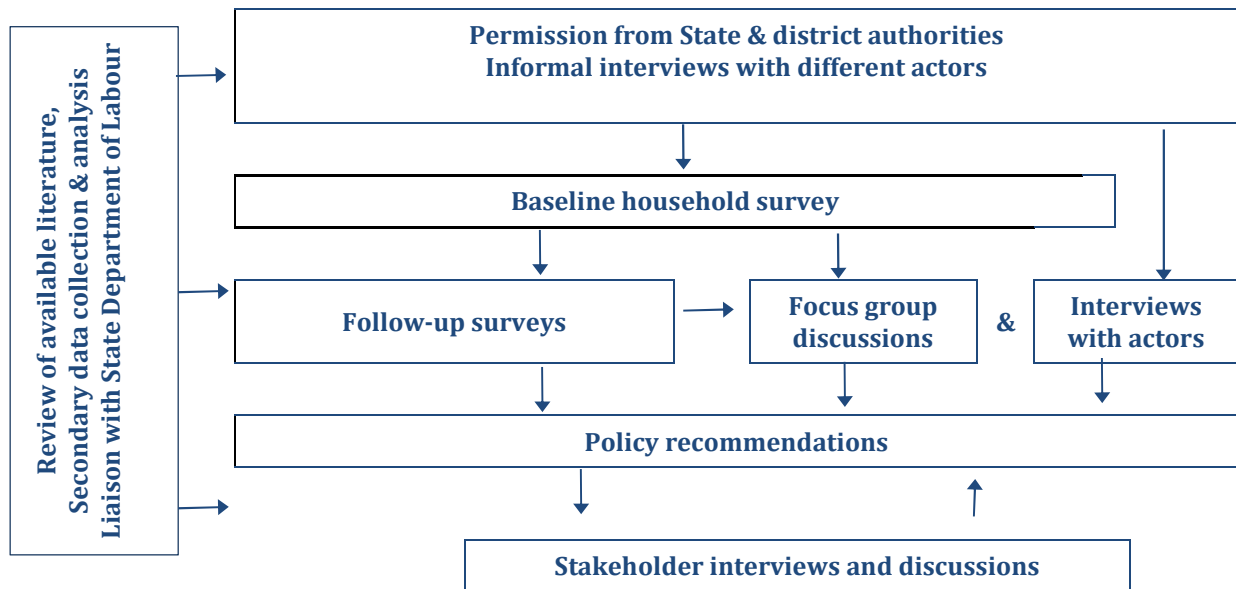
1. What are the reasons for the limited success of Rashtriya Swasthya Bima Yojana (RSBY) that aim to provide free or “affordable” access to care among the targeted population in Karnataka, India?
2. Does social exclusion prevent the development of sustainable and equitable health care financing in Karnataka and if so, by what means does this occur and for whom?
3. Does the health financing arrangement being studied already influence social exclusion and if so, how? What is its potential for increasing social inclusion?
4. What can be learnt about the influence of social exclusion on health financing arrangements from cross-country comparisons of such schemes?

### Additional sub-questions for Karnataka

5. Intra-household manifestation of social exclusion
  - a. Does the design of RSBY promote social exclusion *within* households?
  - b. If so, then *who* is more likely to be excluded and *why*?
  - c. How can this be addressed?
6. Known socially excluded groups like migrants and *devadasis* in Karnataka
  - a. Is RSBY able to address the exclusion of such groups from accessing health services?
  - b. If not, then what are the challenges to the scheme in promoting inclusion?
  - c. How can this be addressed?

The Health Inc SPEC framework explained earlier was developed to explore the possible variables of social exclusion within the social, political, cultural and economic dimensions, and the relationships between them. This framework helped provide variables that were considered ‘risk-factors’ of social exclusion. The purpose of overall data collection was to collect information about these variables, their presence and influence in society, identify links between the different variables and finally to determine how they interact to influence social exclusion. To support the practical application of the SPEC framework, a tool called the SPEC-by-step was developed. This tool combined the SPEC lens provided by the framework for capturing social exclusion with the step-by-step logic hence, called the SPEC-by-step (Enclosed in the Annex). This tool provides a simple structured checklist, which guides the social exclusion analysis in this research. This tool along with the framework, have guided the planning and design for data collection and analysis and, the development of tools for the different methods chosen. The overall design is a mix of both quantitative and qualitative methods to answer the various research questions, and has been shown in the diagram below. The overall timeline for the data collection has been provided in the Annex.

Figure 10. Flowchart of data collection process



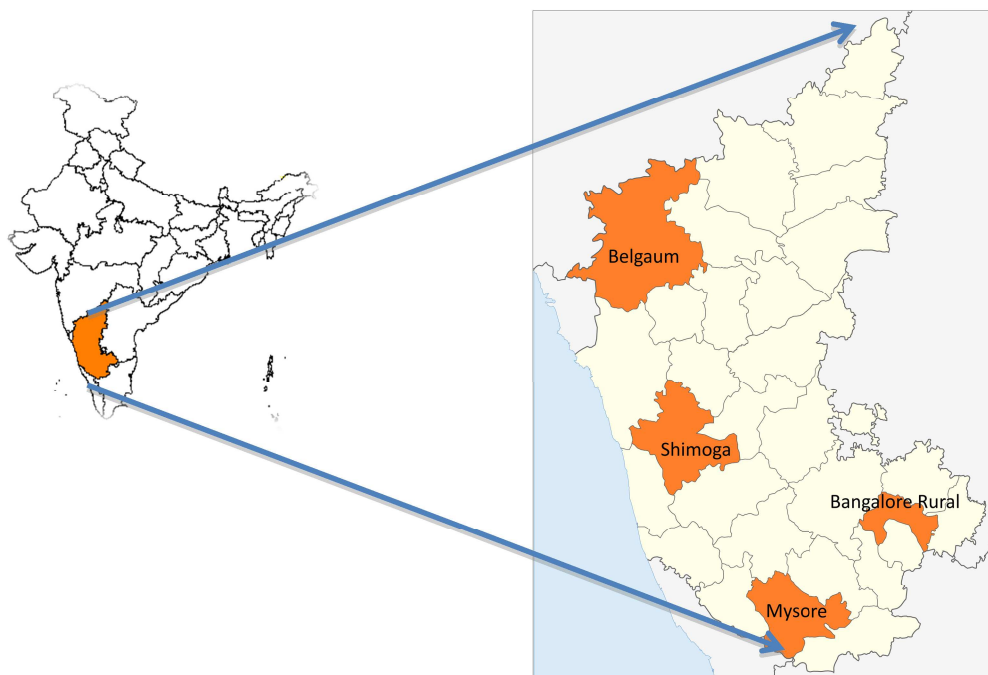
The choice for methods has also been guided by the various research objectives (refer Sec 2.7):

- To answer Q.1, a literature review, and secondary data collection have been conducted and will be supplemented with a multi-level stakeholder analysis.
- To answer Q.2 and Q.3, a longitudinal study of 6000 selected RSBY eligible households is being conducted along with focus group discussions and interviews in the four districts along with the planned stakeholder analysis will help answer the research questions for Karnataka.
- To answer Q.4, the Karnataka case study will be compared with that of Maharashtra and, finally the Indian studies with the African ones.

### 3.1. SELECTION OF STUDY SITES

The population being studied in this study consists of all households in Karnataka who were eligible for RSBY in the year 2011-12. As explained earlier, RSBY was launched in five districts in Karnataka in early 2010<sup>11</sup>. In 2011-12, the initial districts were in their second year of implementation; four of the five districts namely, Bangalore Rural, Belgaum, Mysore and Shimoga were chosen for the study.

**Figure 11. Four districts in Karnataka selected for the study**



Source: generated from baseman from Wikimedia Commons/User:Planemad

The fifth district, Dakshina Kannada with a high literacy rate of 89%, is the most industrialised district in Karnataka and is forefront in education. This coastal district has a distinct culture and language (Tulu) unlike the rest of Karnataka, with a high sex ratio of 1018 females per 1000 males. <sup>15</sup> Due to its atypical context, it was not selected for the study. To provide a clearer picture of the chosen districts, the Human Development Indices (HDI) and related indicators from 2001 are provided in the table below.

**Table 9. Human development index for the selected districts with ranking out of thirty districts**

Districts	Health		Education		Income		HDI	
	Index	Rank	Index	Rank	Index	Rank	Index	Rank
Bangalore rural	0.692	6	0.662	20	0.605	4	<b>0.653</b>	<b>6</b>
Belgaum	0.712	2	0.699	15	0.532	13	<b>0.648</b>	<b>8</b>
Mysore	0.663	11	0.669	19	0.561	7	<b>0.631</b>	<b>14</b>
Shimoga	0.707	4	0.766	6	0.547	10	<b>0.673</b>	<b>5</b>

Source: Karnataka human development report 2005<sup>k</sup>

## 3.2. HOUSEHOLD SURVEYS

A longitudinal approach of collecting quantitative information from selected households was conducted due to the delay in implementation of RSBY in Karnataka in 2011 (explained later). The overall quantitative methods comprised of a baseline survey succeeded by monthly follow-up surveys. The baseline survey was conducted across 6,040 households in the four districts. The purpose of the baseline household survey was to collect details regarding various socio-cultural, economic, and political details of the household and its members, their health status and health seeking behaviour, and their RSBY enrolment details. Following this, each household was visited once a month to collect details of demographic and health related events in the past month like births, deaths, accidents, illness, etc. All hospitalisation episodes were flagged and resurveyed to collect in-depth information about the experience and RSBY utilization.

### SAMPLING STRATEGY

The sampling frame used was the list of eligible households used by the State Nodal Agency, Government of Karnataka for the 2011-12 enrolment details of which has been provided earlier. A soft copy of this list was procured from each District Labour Office for the corresponding District. This list consisted of both rural (BPL & MGNREGS beneficiaries) and urban (BPL) households. The rural and urban lists were separated, and within each sampling frame, a multistage sampling strategy was used. Due to the large population to be covered in the four districts, keeping the feasibility and representativeness in mind, this strategy was adopted.

- **The rural sample was selected in three stages:** As mentioned earlier, *talukas* vary significantly in the same district with respect to development indices, geography, etc.
  - To ensure selection of *talukas* from across the spectrum, the *talukas* were chosen systematically after ranking them based on the female literacy rate. A sampling interval of 2 was used, and the starting point was selected following a coin toss.
  - Next in each selected *taluka*, the *Gram panchayats*\*\* (GP) were listed alphabetically and a quarter of them were selected randomly using the random number table. The GP was the primary sampling unit in the rural frame.
  - In the third and final stage, households were also randomly selected from the eligible households based on probability-proportional to size. The measure of size used in the first two stages was determined to obtain an average number of twenty households per GP.
- **The urban sample was selected in two stages:** The proportion of urban eligible households varied from 10-31% across the districts and was concentrated in the district headquarters. Hence, the urban households were selected from the district headquarters only.
  - In the first stage, a quarter of the areas/slums were selected randomly. The urban area/slum was the primary sampling unit.
  - In the next stage, households were randomly selected from the eligible households based on probability-proportional to size.

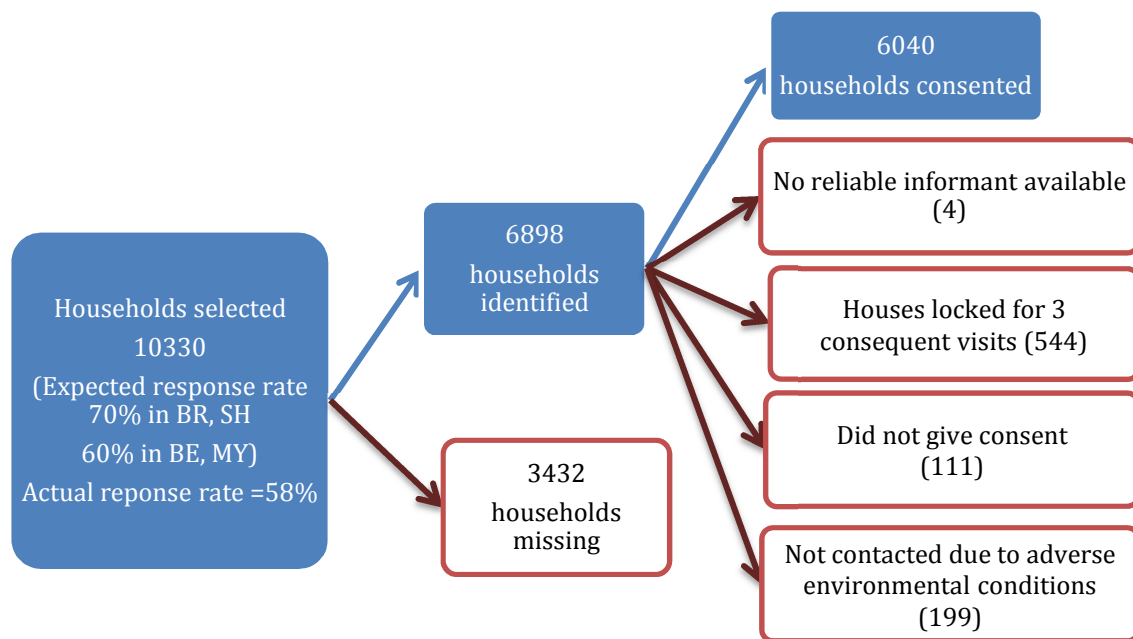
\*\* *Gram Panchayats* are local self-governments at the village level, and *gram panchayat* is the first level of the local self-government in India.

### SAMPLE SIZE

The total number of households needed for the baseline survey was 4,000 households. However due to the longitudinal nature of the study, an additional 50% were taken for possible loss to follow-up, thus bringing the total number of sampled households to 6,000 across the four districts. With a mean household size of 5 and an average hospitalization rate of 24 per 1000, a total of at least 720

hospitalisation episodes in a year would be captured. <sup>14,40</sup> The number of sample households per district was determined by the proportion of the size of the eligible population of the district as shown in the table below. The sampling frame used for this study as based on the RSBY list of eligible households for the year 2011-12 provided by the State Nodal Agency for the four districts. As mentioned earlier, the limited quality of the RSBY list was borne in mind and assuming a low expected response rate of 70%, total households were selected from the list. Pre-testing in districts revealed a poorer response rate in Belgaum and Mysore, and hence a lower expected response rate of 60% was used to select households in these districts. As shown in the figure below, the actual overall response rate was 58% with the highest in Bangalore rural with 77% and lowest in Belgaum with 51%.

**Figure 12. Flowchart showing the actual response rate of the selected households for the baseline household survey**



The households that were listed but no longer resided in the GP or who were informed to not exist in the GP according to the GP members were considered as ‘missing’. The local health workers and residents of the villages also verified this information before the next household was approached. The district wise distribution of the households that were actually covered is shown in the table below.

**Table 10. Details of sample size estimated and actually covered**

District	No. of RSBY eligible households <sup>4</sup>			Sample size	No. of households covered		
	Rural	Urban	Total		Rural	Urban	Total
Bangalore Rural	43,251	6,353	<b>49,604</b>	<b>500</b>	424	75	<b>499</b>
Belgaum	341,688	39,078	<b>380,766</b>	<b>3000</b>	2715	303	<b>3018</b>
Mysore	152,953	27,327	<b>180,280</b>	<b>1500</b>	1269	235	<b>1504</b>
Shimoga	85,610	37,885	<b>123,495</b>	<b>1000</b>	719	300	<b>1019</b>
Total	623,502	1,10,643	<b>734,145</b>	<b>6000</b>	<b>5127</b>	<b>913</b>	<b>6040</b>

Basic information about the areas/GPs where households were missing was collected from the local residents, health workers, and GP members. Reasons for these will be explored further with the district

and state implementers to understand why and how this happened to allow better interpretation of the findings in view of the low response rate.

## DATA COLLECTION TOOLS

A structured questionnaire (**Form 1**) was used to collect data in the baseline survey. This tool was used to collect routine demographic information, along with details for socio-cultural, economic and political variables. This part of the questionnaire was developed considering the SPEC framework developed earlier. Since the baseline survey was conducted a few months following the RSBY enrolment, details regarding the awareness, enrolment card holding status for RSBY were also collected in the baseline survey itself. This part of the questionnaire was developed around the SPEC-by-step tool. Form 1 was a pre-tested standardised questionnaire that was translated and administered in the local languages. Once the questionnaire and related tools were developed, they were shared with peers for comments on the content. All tools including the participant information sheet and consent sheet were translated, reviewed and administered in two local languages i.e. Kannada (for all districts) and Marathi (for Belgaum District only). To refine the language and grammar of the tools, persons local to the districts of survey reviewed the tools and appropriate changes were made. Each team pretested the form in their own district for ten days in villages not included in the survey. Everyday feedback about each question's structure, and ease of administering the form were discussed in each team in the field. This feedback was recorded and shared across the four teams. Modifications were made to a question or format based on this feedback. For further details, both rural and urban versions of the Form 1 are available in the Annex.

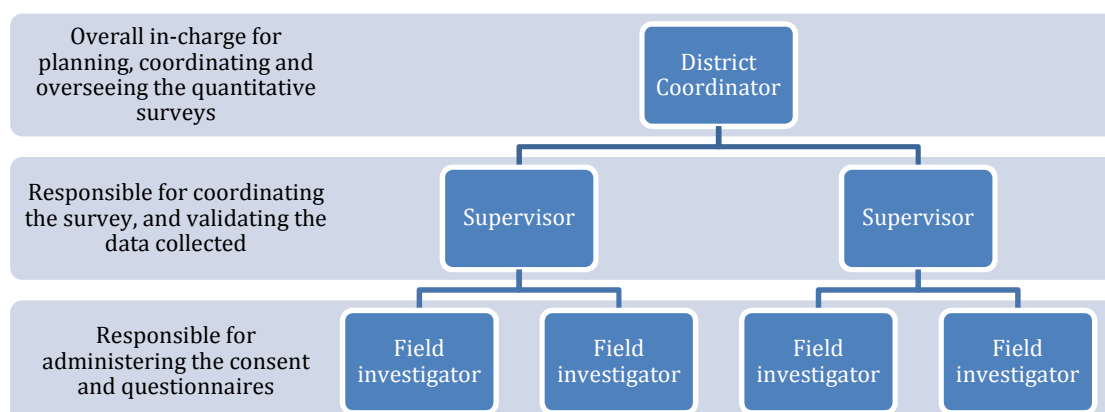
In the follow-up visits, a short structured questionnaire (**Form 2**) was used to collect information from the households about any sickness or hospitalization in the past month. This form also collected details of events in the preceding month(s) like births, deaths or additions to the household through marriage if any. Form 2 was also pre-tested, standardized and translated in the local languages similar to Form 1. Form 2 is available in the Annex as well.

In post-hospitalisation visits, a structured questionnaire (**Form 3**) was used to collect detailed information about the hospitalisation episode including details of the disease/condition, treatment details, related expenditure, overall experience and RSBY utilization if done. A few open-ended questions were included in this form to capture experiences of the person/family beyond the structured questions, and will be analysed qualitatively. Form 3 was also pre-tested, standardized and translated in the local languages similar to Form 1. Form 3 is available in the Annex.

## DATA COLLECTION PROCESS

**Data collection team:** While the tools were being developed, a data collection team was recruited and oriented in all four districts. This team comprised of Field investigators, Supervisors and a District Coordinator in each district. The structure and role of the team for Bangalore Rural District has been described in the figure below.

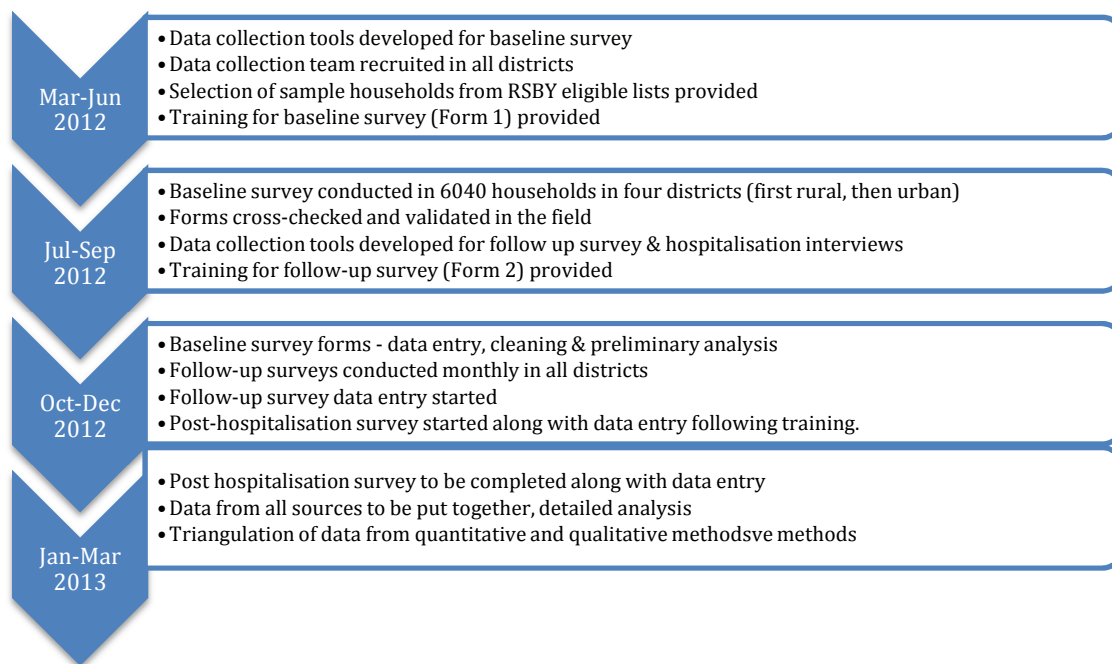
**Figure 13. Structure of the data collection team**



Data collection teams were formed in all four districts and thus, a total of four District Coordinators, twelve Supervisors and fifty Field Investigators came together for the baseline survey. The number of Field Investigators halved during the follow-up survey due to the short questionnaire and familiarity with households. The Supervisors conducted the post-hospitalisation survey as and when they were reported. The data collection in all four districts was coordinated and supervised by the team of Scientific Officers at the office headquarters at Bangalore. Prior to both the baseline and follow-up surveys, training was provided in batches for the entire data collection team. This included three-day classroom trainings followed by two-day practical orientations in the field in areas not selected for the study. The forms were then pre-tested in the field for two weeks as explained above with regular discussions and supervision. Training for Form 3 was provided in a similar format to Supervisors alone.

**Duration:** The surveys were conducted over six months between July and December 2012.

**Figure 14. Timeline of the household surveys**



**Baseline household survey:** Prior to the survey, the study was discussed with the key actors in the State and District level for the Labour department and district administration, and their permission and cooperation was sought to undertake the surveys.

Following this, teams prepared micro-plans by collecting information about the area to be visited and arranged the logistics for travel and accommodation if needed. All teams moved as a single group and completed one *taluka* before proceeding to the next. This allowed for discussion with *taluka* level actors, better management of logistics, close supervision and validation of data in the field. Since this survey was the first point of entry into the selected villages, the teams sought permission and cooperation from the local GP, and local health volunteers if available. Thus, teams were assisted by local actors to identify the selected households. A team of Field Investigators visited the GPs a day ahead of the survey and identified the selected households, created micro-plans for the next day and look for missing houses if any.

The baseline household survey was also the first point of contact with the selected household, hence detailed participant information sheets and contact information of the research team were shared with each interviewee household. Informed consent for the entire duration of the study was then taken, and then only the survey questionnaire was administered. The head of the household was the main informant for the both baseline and follow-up surveys. In his/her absence, the spouse or available senior member

was interviewed. Form 1 took an average of forty-five minutes to administer, and an average of five questionnaires were administered per Field Investigator per day. The households were also provided with folders to collect all relevant documents in the event of sickness/ hospitalization in the remaining study duration along with instructions for maintaining this. The Supervisors checked all forms in the field itself. In case of incomplete or incorrect entries, the concerned Field Investigator revisited the household to complete/correct it. The team met once a week to discuss the preceding week's survey, difficulties faced and observations about the local environment. Once a *taluka* was completed, then the entire team proceeded to the next *taluka*. An exception to this was the team in Belgaum. Unlike other districts, the team was divided into two units based on the language of survey. All four teams completed the rural survey first and then proceeded to the urban areas.

**Follow-up surveys:** Once the baseline survey was completed, each household was followed up once a month to collect information about any significant events, hospitalization and RSBY utilization if they occurred. In each district, the team was divided into smaller units – one for each *taluka* comprising of one Supervisor and two to three Field Investigators (except in Shimoga where one Supervisor took charge of two *talukas*). Each Field Investigator was then assigned specific households that he/she followed up once a month for three months administering the Form 2. The Field Investigator administered Form 2 and flagged any hospitalization episode identified during the survey to the Supervisor. Once a week, the local team met and checked forms, discussed the week's survey and difficulties faced if any. The third and final round ended in December 2012 (except Raibag *taluka* where only two rounds were conducted due to shortage of field investigators).

**Post-hospitalisation survey:** The Supervisor, once informed about a hospitalization episode among his/her assigned households, contacted the concerned household with the help of the Field Investigator. He/she visited the household following discharge from the hospital and administered the Form 3 capturing the hospitalization experience in detail. Each case is informed to the respective District Coordinator.

**Quality of data collected:** The Field Investigators and then the Supervisors checked all forms at the end of every day of data collection for missing or incorrect data. Any errors identified were corrected/completed by re-contacting the concerned household. To validate the data collected by the Field Investigators, the Supervisors randomly picked 10% of the forms, revisited the households and checked the validity of the data collected by the Field Investigator. Supervisors were provided with a structured checklist to enable this efficiently. The team again reviewed all forms during the weekly meetings. District Coordinators checked 10% of the total forms selected randomly for possible errors again. Any form that was identified to be incomplete or inaccurate was kept aside and reviewed by the District Coordinator. They also reviewed every post-hospitalisation form administered.

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## DATA ENTRY AND ANALYSIS

The software used for data entry for the survey forms is Epi Data version 3.1. The data entry operators were trained and supervised by the research team itself. The data entered was validated by randomly crosschecking entry of forms for each district by the research team. The data was then cleaned and analysed using Statistical Package for Social Sciences software version 20.0. Data collected from Form 2 & 3 on hospitalisation and utilisation were linked to the respective households to ensure completeness of information. Confidentiality was ensured during the process via agreement with the data entry agency, orientation to the data entry operators, and by masking the personal information through the design of the forms themselves. Only the core research team (scientific officers and District Coordinators) has access to the full data for analysis and verification.

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## CHALLENGES FACED

During planning, conducting and supervising the surveys, a few difficulties arose that are discussed in detail in this section.

- **Longitudinal approach:**

Initially the quantitative data collection was planned as a cross-sectional survey that would collect data for the last one year. RSBY was first rolled out in 2010-11. However expanding the scheme to cover MGNREGS beneficiaries, the urban areas, and the remaining 25 districts delayed the second round in 2011. This led to a gap in the scheme of more than six months. The scheme was re-launched for the second time in early 2012. Collecting information for the past experience with RSBY in 2012, hence, would have high recall bias and less reliability. Hence, the approach was changed to a longitudinal one where households would be followed up to collect at least six months' information about scheme utilization in 2012-13 given the time constraints.

- This led to a significant increase in time and effort into re-planning, developing multiple tools and utilization of resources. This led to a delay in initiating the data collection, and due to the increase in duration of data collection, the data entry and analysis were considerably delayed.
- Coordination of data collection of four teams for six months became a challenge by itself, and required a large team to be trained and involved to ensure close supervision and quality data.
- The sample size was increased from 4000 to 6000 to accommodate loss to follow-up with time.

- **Difficulty in identifying selected households**

The sampling frame used was the official RSBY list of eligible households for the year 2011-12 procured from the respective District Labour Offices after receiving permission from the State Department of Labour. Identification of households on this list was often difficult due to various reasons. In some areas, only the name of the head of household was available to identify the household while there were multiple households with the same name. In some areas, only the first name was provided that made identification of households difficult and time-consuming. In some GPs, local actors informed the research team that a large section of the list was incorrect or not resident in the indicated GP. The research team discovered these issues early on and soon assigned a few Field Investigators to visit GPs a day ahead to identify houses and look for missing houses if any. Teams also sought assistance from local health volunteers and GP members to identify the households speedily. This was documented and reasons for this will be explored with stakeholders during their interviews, and through a nested study

- **Reaching the selected households:**

In hilly areas in Shimoga, houses were fewer but often isolated, scattered with a considerable distance between them, making it difficult for the teams to cover them. The rains during the survey and poor roads made it difficult in certain sections of the different districts for teams to conduct the survey. In one *taluka* in Shimoga, the rains caused the river to flood and submerged sections of villages and roads due to which some households could not be reached. It is possible that for similar reasons, these households or villages may be excluded from various services as well. These areas have been noted, and will be visited during the qualitative phase to explore these possibilities.

- **Interaction with the community:**

In some GPs, a few community representatives/members were not cooperative with the research team due to various reasons like past poor experience with surveyors, suspicion of outsiders, etc. This was usually settled by discussions of District Coordinator and Supervisors with the GP members, and due to the permission letter from higher authorities. In rare instances, this also did not work and the GP or

section of households was excluded from the survey. Such instances have been documented and will be analysed along with other non-responders.

### 3.3. QUALITATIVE METHODS

The Karnataka Health Inc team used a composite of four qualitative methods. These were namely:

- a) Content analysis of RSBY and other relevant documents,
- b) Analysis of relevant published and grey literature on social exclusion and RSBY,
- c) In-depth interviews (IDI) with different actors, and
- d) Focus group discussions (FGD) among the community.

Content analysis of the official documents on RSBY was the first step and preceded the primary data collection. This provided insights into the design of the RSBY scheme, the process of implementation at different levels and the expected role of each actor involved in the scheme. These documents also served as a guide in preparation of the tools for the quantitative survey and the planned in-depth interviews with the different actors. The literature review focused on social exclusion and its reflections on all these dimensions of the SPEC framework. Along with social exclusion, the literature review also covered the existing studies on RSBY and its implementation in the field.

The primary data collection methods included IDIs and FGDs. IDIs were conducted among implementers, designers, and other actors who directly or indirectly influenced the implementation of the scheme. The purposes of these interviews were to explore their role and its challenges, and understand how and why exclusion occurs during implementation of the scheme as identified by the survey. The purpose of interviews with community representatives and representatives of excluded groups were to understand their perspectives on exclusion, and also how to tackle it.

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#### TOOL DEVELOPMENT

Tools for the IDIs with different actors were prepared based on the SPEC by step framework and the RSBY official guidelines. Preliminary baseline survey findings were taken into account for the preparation of the tools. Once the initial sets of tools were made, they were reviewed by peers and modified based on their comments. Each interview built on the findings from the previous one and the tools were constantly updated and modified in the field prior to the next interview.

The FGD topic guides were developed similarly keeping the type of respondents in mind. The broad areas covered were:

- Prevalent health seeking behaviour and reasons for the same
- Perceptions and experience with RSBY
- Perceptions and experience with other welfare schemes available
- Community perspectives and experiences of social exclusion at different levels

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#### SELECTION OF RESPONDENTS

A guide consisting of basic socio-cultural profile and preliminary findings on exclusion from RSBY implementation was prepared from the quantitative data for each GP/urban area in each district. Depending on type of FGD desired, GPs/urban areas, specific communities within the GP/area, or households were selected purposively. There were three broad groups of eligible beneficiaries that were brought together namely, all RSBY enrolled beneficiaries, all non-enrolled beneficiaries and mixed groups.

A few excluded communities were identified during the process of the survey, which were also purposively selected. These included *devadasis*, excluded SC & ST communities, community with high

migration, a few difficult to access areas, and in Belgaum district, Marathi speaking households approached.

For interviews, the GP members and field key officers involved in RSBY implementation at the grass-root level were primarily selected. Key informants identified during the FGDs and surveys were also approached in similar areas as mentioned above. To acquire a 360-degree picture of exclusion from utilisation, empanelled service providers were also approached.

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## PRIMARY DATA COLLECTION

As mentioned above, the primary data collection methods included FGDs in the community and IDIs with different actors. FGDs were conducted at a neutral place (like nearby school) where people could open up and share their views. There was a moderator and a note taker, and the discussions were audio recorded. Informed consent was taken at the beginning of each of the FGD both for participation and for audio recording. A fact sheet about RSBY was distributed to the participants and information about the scheme was given to them at the end of each FGD. The FGDs were focused on getting the community perspectives on the implementation of RSBY scheme and various experiences of exclusion at the different steps.

The chronology of interviews followed a bottom-up approach, i.e. the researchers started with the interviews of beneficiaries at the grass root level, and then approached the implementers of the scheme. The interviews were conducted at their place of residence/work or other venues based on the respondent's choice and privacy. Informed consent was taken prior to the interview both for participation and for audio recording. In a number of cases, the respondents did not provide consent for audio recording, in which case notes were taken for the interview. A total of 23 FGDs and 32 interviews were conducted across the four sites. Both were conducted in the local language only.

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## DATA TRANSCRIPTION, CODING AND ANALYSIS

All interviews/discussions were transcribed verbatim. Professional transcribers translated and transcribed the audio recorded interviews/discussions. Names and any information that could be used to identify the respondent were removed appropriately to maintain confidentiality. The researcher who conducted that particular interview/discussion then verified each transcription, and added additional comments from the original notes. Both the interviewer and transcribe were bound by confidentiality agreements to ensure that sensitive information was not disclosed to any one else. Following this, each transcript was coded using N Vivo software version 9 using a coding framework based on the research questions, SPEC framework, and other issues that emerged from the survey findings. Key findings from each interview were summarized which formed the preliminary analysis. Such preliminary analyses of individual transcripts were discussed with other team members to validate these findings. The analysis then was done on various levels within and across the districts (e.g. beneficiaries as a group, beneficiaries across districts, etc.). At each level, data was triangulated with other interviews, quantitative findings and the existing literature.

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## CHALLENGES FACED

- **Selection of participants for FGDs:**

Initially the team categorised and selected different locations based on the SPEC-by-step approach looking for specific step related information. For instance, one category was GP/areas that had high RSBY awareness score with high enrolment rates, while a second consisted of high RSBY awareness with low enrolment rates, and so with receiving card, etc. However this created a lot of difficulty in selection of participants and also irrespective of which level a participant belonged to, the overall awareness about RSBY was quite low and discussions about general exclusions experiences were possible. This strategy

was reassessed immediately and changed to the approach used i.e. all enrolled, mixed group and a few FGDs focussing on specific communities/issues with general community.

As explained earlier, the findings from the survey and general observations of the field team guided the selection of the villages/areas where the FGDs would be conducted. This also guided the composition i.e. type of FGD that would be conducted like only enrolled beneficiaries, mixed group, etc. The study households were used as the starting point, and then using a snowballing technique, other possible participants were invited for the discussion and while it led to rich discussions, it was time consuming and took considerable effort on the part of the field team.

- **Selection of venue for FGDs:**

Initially a central location was selected for everyone's convenience like the GP office or attached hall. However it was seen in the beginning itself that this led to three challenges: a) few office goers and even GP members insisted on being a part of the discussion, b) few participants hesitated to open up and talk freely as they were aware that local administrators were around, and c) few potential participants who had been invited from far villages, or had poor access to transport found it difficult to travel to this location and opted to drop out from such discussions. The team recognized the importance of all three challenges as the discussion was aimed at exploring social exclusion and these factors if not taken care of would significantly bias the outcomes of the FGDs and provide a limited picture. Hence, the strategy was changed and all discussions were conducted in more private locations that were away from the GP office, and at times at the village level itself.

- **Discussing social exclusion:**

As mentioned earlier the importance of creating an environment of comfort and trust was important for such discussions where participants could without any hesitation share experiences and opinions. However in mixed FGDs and those conducted in general community, presence of any GP/council member, wealthy person and political leader significantly affected the discussion. Hence the team ensured that such individuals were not invited to FGDs or interviewed them separately when needed. Apart from these, there were other informal divisions among participants based on education, income, political support, etc. Getting all participants to participate in the discussion was a challenge for the moderator.

- **Expectations from researchers:**

Similar to the experience during the household surveys, the local community often confused the researchers to be sent by the government to enquire about the implementation of RSBY. The teams spent considerable time during selection and before starting any discussion or interview to explain to the participants about who they were, their intended purpose from discussion and the utilization of outcomes from the discussion. Still many times during the discussions, few participants requested the moderator to take their complaints/issues to the higher authorities on their behalf. Many also requested help in taking their situation in to account and the moderator's help in ensuring that during the next enrolment camp the problems would be resolved.

### 3.4. ETHICAL CONSIDERATIONS

The study proposal had received ethical approval from the Institutional Ethics Committee of IPH in their meeting held on 24<sup>th</sup> March 2012. The suggestions of the committee were followed during the course of the study. Once the tools were prepared they were submitted to the committee for review. Half-yearly progress reports are also being sent to the committee to keep them informed.

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## CONSENT FORMS AND PERMISSIONS

Before initiating the data collection, permission was obtained from the State Department of Labour, Government of Karnataka. Permission was also obtained in each district from the district administrators on behalf of the community i.e. District Collector and/or the Chief Executive Officer, Zilla Panchayat. In each GP before starting the data collection, the local Supervisor or District Coordinator verbally obtained permission from a GP representative.

The baseline survey was also the first point of contact with the selected households. Hence, informed consent for the entire duration of the study was taken prior to administering the survey questionnaire. Participant information sheets with key details of the project were prepared in the local language along with contact information of the investigating team, and were given to each interviewee household. This was explained to them verbally especially for those who could not read. Informed consent was then taken in written format from the interviewees for participating in the study. For participants who could not sign their name, the left thumbprint was taken in the presence of a witness. In case the interviewee was willing to participate but refused to sign or put their thumbprint, consent was verbally taken. Information and consent were not limited to the survey alone but for the entire study duration. Even though the consent for participation was taken in the start itself, at each step of contact, verbal consent was retaken to confirm their willingness to participate.

Contact information of the local research team Supervisors and District Coordinator was provided to each household for further clarifications. Some of these participants often called up the team members and clarified their queries, and at times even sought further information about the study or scheme. The participant information sheets and consent sheets are available in the Annex.

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## CONFIDENTIALITY AND ANONYMITY

To avoid any chance of disclosure of personal information or information that could be traced to identifiable individuals through the primary data, the following steps were undertaken:

- Each household was provided a unique identification number, which was then used to identify and follow it during data entry and analysis. Member identification codes were generated in Form 1 that was used to collect individual information. For interviews and FGDs also, the names of respondents will not be recorded; they will be linked to the household number if needed. Access to the entire dataset was limited to the core research team only.
- Any requests to exclude interview data or parts of interview from the dataset later (after completion of interview), by the interviewee were respected and followed. Anonymity was ensured while reporting and sharing findings. For participants who want to talk “off the record”, their requests were respected and confidentiality was maintained.
- Respecting the confidentiality and anonymity of respondents, only data/findings free of any identifiable information will be shared with the different stakeholders.

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## DUTY TOWARDS PARTICIPANT HOUSEHOLDS

Unlike cross-sectional studies, the team interacted with the community and different actors for more than six months due to which it developed a relationship with them especially the participant households. The team members were sometimes asked for assistance. Often the assistance was about more detailed information about RSBY, empaneled hospitals and other government schemes. However at times, the investigators were asked for more active assistance like taking complaints on behalf of the individual/community to Government representatives, interacting with medical personnel in case of hospitalisations, financial assistance, etc. The team discussed this in detail and decided to provide assistance in the form of providing requested information to community members and providing regular

reports to the concerned State Department. Conducting a household survey and providing information about RSBY have shown in earlier studies to increase the importance of the programme among surveyed households leading to a Hawthorne effect.<sup>54</sup> However keeping in mind that the participant households are in reality vulnerable households from the poorest section of the community, it was decided to be unethical to not do so irrespective of its possible effects on the results. This will be kept in mind during analysis and interpretation of the results.

In this chapter, the key findings of the study are discussed in detail. It covers three major sections namely, profile of the survey households, the overview of the SPEC by step tool applied to the findings followed by discussion at each step of RSBY implementation and the interaction of SPEC dimensions of exclusion with access to services.

#### 4.1 STUDY POPULATION PROFILE

##### DEMOGRAPHIC PROFILE

A total of 6040 households were surveyed comprising of 33,118 members across the four study districts. This includes 5127 households from rural and 913 households from urban areas. These households are spread across 151 GPs in 15 talukas and 23 urban slums/areas, across four districts. The key characteristics of these households are shown in the table below.

**Table 11. Comparison of few indicators between study population and state figures**

Characteristics		Study population	Karnataka (Census 2011)
<b>No. of households</b>		6,040	4,076,642*
<b>No. Of talukas</b>		15	176
<b>Sex ratio</b> (no. of females per 1000 males)		966 (959 rural, 1011 urban)	968
<b>Child proportion (0-6) years</b> (per cent)		11.1	11.2
<b>Female literacy rate</b> (no. of literate females per 100 females)		56.6 (55.8 rural, 62.3 urban)	68.1
<b>Social category</b> (per cent)	<b>SC</b>	23.4	16.2**
	<b>ST</b>	9.5	6.6**
<b>Religion</b> (per cent)	<b>Hindu</b>	90.2	69.9**
	<b>Muslim</b>	7.2	12.4**
	<b>Christian</b>	0.3	1.9**
	<b>Others</b>	2.4	15.7**

**Household details:** The dominant type of family in both rural and urban areas was nuclear family (55.7%). The median household size was 5 with 39% rural and 70% urban households with a smaller household. The study population had a balanced overall sex ratio, especially among adults, with a slight increase in male-female ratio in the younger age groups.

**Religion:** A large proportion of the study population reported their religion as Hindu (93% in rural and 78% in urban areas). Islam was reported more in urban areas (21.4%), while it was a small minority in rural areas (5%). Other religions (Christianity, Jainism and Buddhism) constituted a very small minority in the entire district (<3%). In general, cities and villages in all districts reported over 80% following Hinduism, except in Shimoga where urban area reported nearly equal proportions of Hindus (54%) and Muslims (45%).

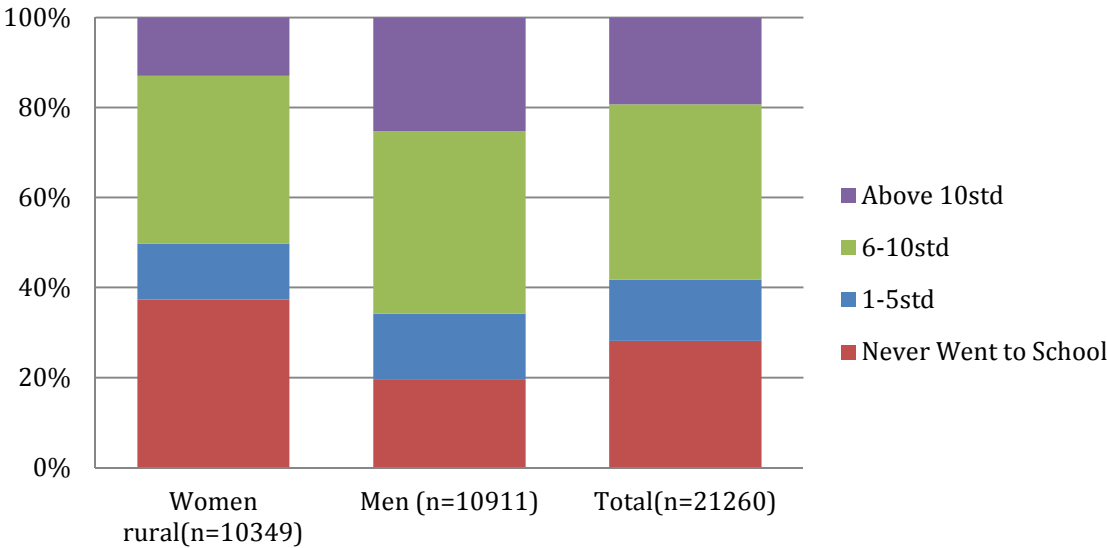
**Social category:** Scheduled castes (SC) and scheduled tribes (ST) constituted nearly one-third (30%) of the study population in rural and nearly half (47%) of the study population in urban areas. 26% households in rural and 13.6 % in urban areas belonged to other backward classes (OBC) category. However, one-fourth of the study population reported that they while they knew their caste, they were unsure of which social category they belonged to. This is an important finding since those in the SC, ST and OBC categories are provided reservation in the education and job sectors, and various welfare schemes by the government, and these households were not accessing them due to their ignorance.

**Language:** Kannada (official language of the state) was the main medium of communication among the households, followed by Marathi (especially in Belgaum in view of the district’s close proximity to the Marathi-speaking neighbouring state of Maharashtra.). However, urban areas reported relatively lesser proportion of Kannada speakers and more people using Hindi/Urdu and other languages as the medium of communication. In Belgaum and Shimoga districts, only about one-third (30%) of the urban population spoke Kannada. In Shimoga, this was because of the significant Muslim community in the city, who speak Urdu.

**SOCIO-ECONOMIC PROFILE**

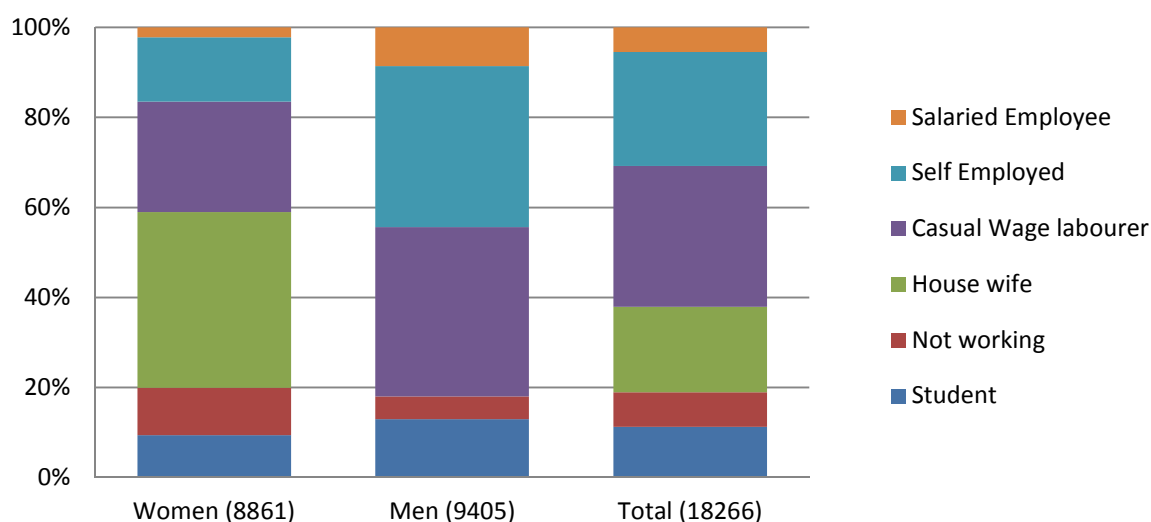
**Education:** The male literacy rate was 73%, significantly higher when compared to that of women (57%) The female literacy rate was only marginally higher in urban areas (62.3%) than in rural areas (55.8%) while for men the difference was negligible. The proportion of women who never went to school (~40%) was twice that of men (20%) while the reverse was true about higher education.

**Table 12. Gender-wise distribution of level of education (age 7 years and above)**



**Occupation:** With regard to the occupational status in rural areas as shown in the table below, 60% of the individuals in the productive age group (15-59 years) were earning members of the households. This was as high as 80% among men and decreased to 40% among women. Of the total, 25.6% were daily wage earners, 21% self-employed and only 4.4% had a regular salaried income either in government or private sector. Overall 60% of the women did not earn any income compared to men (<20%) as shown in the figure below reflecting the role of gender in an average household based on societal norms.

**Figure 15. Gender wise distribution of occupation in the productive age group (15-59 years)**



**Access to basic amenities:** Nearly everybody in the study population lived in their own house in the rural areas (95 %) as compared to the urban households (79%). Only about 14% in rural areas and 21% in urban had *pucca*<sup>1</sup> house. 33.4% in rural and 22.6% in urban population received some form of financial assistance from government towards this. The variation between the urban and rural households, and across the districts was found to be significant. For instance, 71.1% of urban households had access to latrines while nearly this reduced to nearly half in rural households. This was lower in the entire Belgaum district (24%), while in Mysore city it was significantly low at 11.5%.

**Table 13. Rural-urban distribution of access to basic amenities**

Access to basic amenities	Rural (n=5217)	Urban (n=913)
	Per cent	Per cent
Owned their house	94.4	<b>79</b>
Drinking water only available far away	<b>78.2</b>	96.6
Latrine available in their household premises	<b>38.7</b>	71.1
Had access to general electricity connection	<b>60</b>	70
Owned land	66.6	<b>4.4</b>

Study of asset ownership revealed that the commonest asset found in nearly all households (90%) was the mobile phone while ~60% owned televisions. Other assets looked at were radio, refrigerator, electric fan, possession of bicycle or two-wheeler, cooking gas and domestic livestock.

## OTHER VARIABLES

**Access to schemes:** Since the possession of a ration card is a prerequisite for availing the benefits of most government welfare schemes, this was studied. It was found that both in rural and urban areas around 96% households had a ration card. Of these, 86 % in rural and 92% in urban possessed a ration card in the below poverty line category. In Mysore and Belgaum, this was near total (95.2 %and 97.2% respectively).

<sup>1</sup> House that is constructed using permanent materials like concrete and bricks.

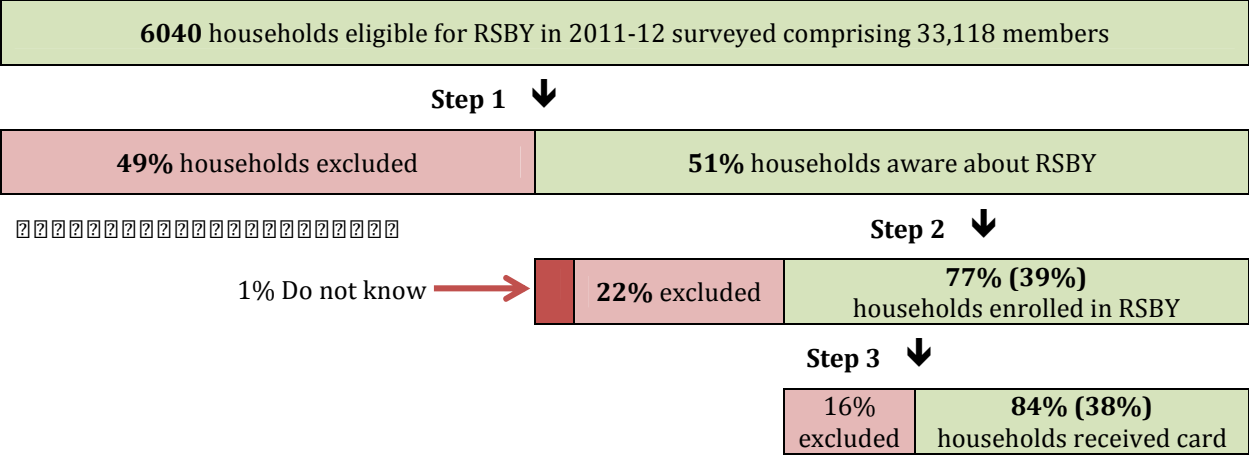
Based on the SPEC framework, political participation was assessed considering three types of variables namely, availability of the voter’s identification card<sup>2</sup>, voting in the past election, and also involvement in local/regional politics. Both urban (99.3%) and rural households (98.4%) had a voter’s identity card for at least one member of the household. In addition to this, nearly all of them (99%) had voted in the last election. Hence, studying exclusion in terms of these two variables was not possible and the focus was shifted to the third one i.e. participation of any household member in the political process (formal or informal political affiliations) which was found to be 15% in and 7% in urban areas.

## 4.2 SPEC-BY-STEP APPROACH

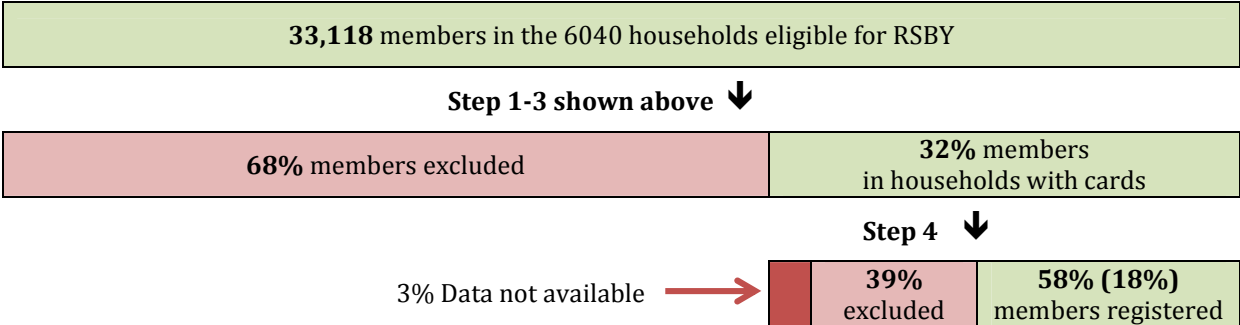
In this section, SPEC-by-step tool was applied to the findings of the different methods to both present and discuss the results of the study. The 6040 households comprised of both MGNREGS beneficiary households and non-MGNREGS BPL households as explained earlier. The figure below summarises the SPEC-by-step picture of RSBY implementation across the four sites. Each step is discussed in detail in the following sections.

**Figure 16. SPEC-by-step tool applied to the study households\***

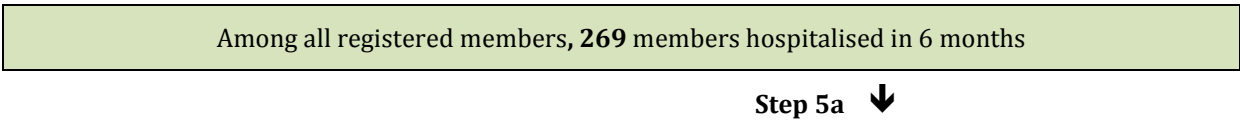
### Part 1: At the household level



### Part 2: At the individual member’s level



### Part 3: Utilisation of the scheme



<sup>2</sup> The voters identification card is used as an identification document for voting in any form of election in India.

89% members excluded	10% hospitalised under
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Step 5b ↓

95% partly benefited	5% full benefits
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## STEP 1: EXCLUSION FROM BEING AWARE OF RSBY

Step 1 was concerned with exclusion of households from being aware of RSBY. Awareness of RSBY was narrowly defined as ever heard of the scheme or seen the RSBY card. This reflected a minimal awareness among the households surveyed. As seen below, 51% households had a minimal awareness about RSBY. This ranged between 40-60% across the four sites as seen in the figure below.

### Part 1: At the household level

6040 households eligible for RSBY in 2011-12 surveyed comprising 33,118 members
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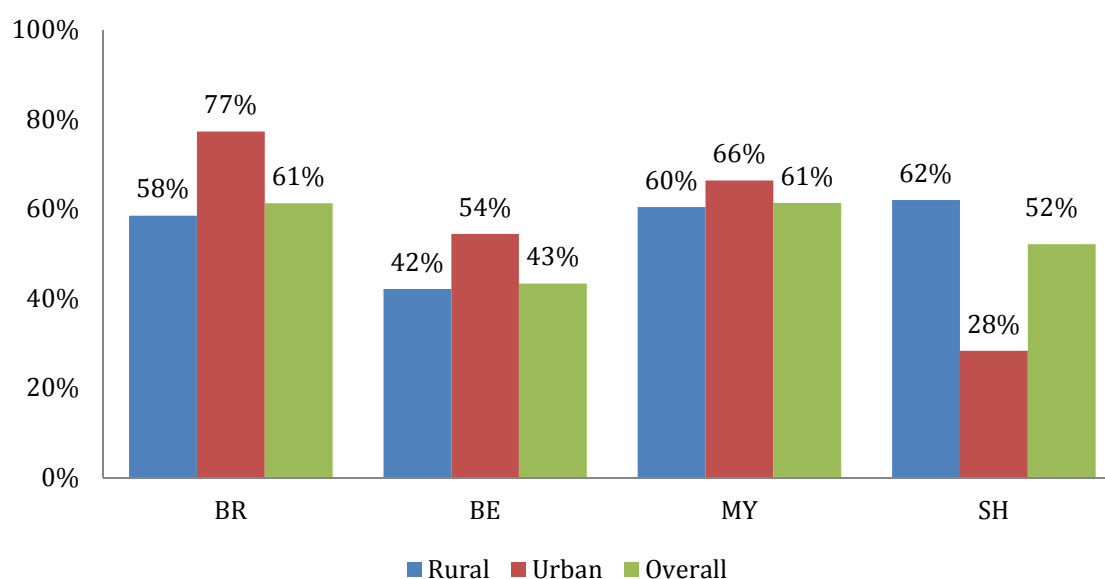
Step 1 ↓

49% households excluded	51% (3068) households aware about RSBY comprising 16,492 members
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## AWARENESS OF RSBY AMONG MINIMALLY AWARE HOUSEHOLDS (N=3068)

In most districts, the awareness was higher in the urban areas (except Shimoga) than the rural areas, even though this was the second year of implementation in the rural areas while only the first in the urban ones. Only 17% of the aware households associated the scheme or card with RSBY or health insurance. 34% associated the card with health or hospitals while 39% did not associate the card or scheme with any name.

Table 14. Distribution of aware households across the four sites<sup>3</sup>



<sup>3</sup> BR – Bangalore rural, BE – Belgaum, MY – Mysore, SH - Shimoga

Most of the aware households received information about RSBY from GP members or Government functionaries (45%) esp. in rural areas, and by word of mouth (23%). 19% households in both rural and urban areas named the local health volunteer/workers as their informants. All the modes of print and electronic media put together accounted for less than 5%.

Detailed awareness regarding the scheme beneficiaries and benefits were assessed among the aware households in an attempt to gauge the depth of their knowledge and understanding regarding the scheme. While two-thirds (69%) of the aware households knew the scheme was designed for BPL households, only 5% were aware that the scheme had been extended to MGNREGS beneficiaries also while 27% did not know which group/community was targeted by the scheme. Only one-third of the aware households knew that up to 5 members of a household could be included under one card. Regarding the benefits available in the scheme, 70% of the aware households knew that free hospital treatment was provided under the scheme while only 30% knew that coverage of up to Rs.30,000 was provided by the card. Details of other benefits were known by <5% of the households. The awareness among urban households was only marginally higher than that among rural households.

A comprehensive level of awareness was looked for defined by three parameters namely, a) awareness that the scheme/card targeted BPL households; b) it covered hospitalization related expenditure alone, and c) up to 5 members of a household could be included in one card. Overall only 20% of the households had this level of comprehensive awareness, higher in urban (26%) than in rural (18%) households.

## SOCIAL EXCLUSION AT STEP 1

49% households were excluded at step 1 alone implying that absence of access to information about the scheme was the key step for exclusion from the scheme. The key variables across the SPEC dimensions found to be strongly associated with exclusion at this step are summarised in the table and discussed in detail below:

**Table 15. Key SPEC variables associated with exclusion at step 1 identified by the survey**

		Z score	p value
<b>Social</b>			
Belonging to a joint/extended family		6.5634	<0.001
Head of household	Woman	2.5565	<0.05
	Widow	2.2652	<0.05
	Age > 65 years	2.3417	<0.05
Social categories	General	4.6572	<0.001
	Scheduled tribe (ST)	2.0629	<0.05
Belonging to a social category minority (urban)		4.2592	<0.001
<b>Economic</b>			
Not having enough food for the family		4.49842	<0.001
MGNREGS card holder		-3.0145	<0.01
<b>Political</b>			
Participation in local/regional politics		-5.0629	<0.001
Living close to PHC (<5km)		-5.2991	<0.001

Infrequent/nil visits to the taluka headquarters	5.4757	<0.001
<b>Cultural</b>		
Being Muslim (urban)	5.6126	<0.001
Belonging to a religious minority	2.7995	<0.01
Marathi speaking household	8.3507	<0.001

Households belonging to larger households, joint/extended families, living in kutchha houses and those that reported not having enough food for the family were more likely to be not aware of RSBY i.e. excluded. The profile of the head of household also played a key role in determining exclusion as shown in the table above influenced by age and gender.

Discussions with the community revealed importance of social networks and being educated. The educated were perceived to dress and behave appropriately in social and political circles thus being favoured by political leaders and GP members. The educated also had access to both print and electronic media, and hence easily access information shared about various schemes. In Belgaum esp. households that spoke Marathi (the second most spoken language in that district) were more likely to be excluded probably due to the fact that the official language for dissemination of information by the government is Kannada putting them at a disadvantage irrespective of their literacy.

People with social contacts like local health workers/volunteers, or relationships with GP members or other political leaders easily received access to information about the scheme. Weakening community ties and hence poor solidarity was blamed for deficiencies in individuals sharing information with their neighbours. Interpersonal conflicts between villagers' even neighbours acted as a barrier in sharing information with one another. Perceived as growing selfishness, and focussed concern on one's own benefits with a weak/nil sense of shared community responsibility are believed to restrain even the highly educated from sharing information with others. In such environments, the GP members and political leaders favour those with strong social networks and support of other households. In return for their support, they are provided with benefits like access to various schemes, other favours, etc.

*"Now, if I do all the work you say and be in front of you and support you, my work will be done; and if I mind my own business and not interfere in anything, they will not do my work. They will say that he will not come for anything and support us, then why should we get him the loan/service? What is the use for us from him? They will not allow such persons to be with them. It is like that in this area"- FGD\_BR\_U1*

Belonging to a minority either social or religious was associated with excluded households esp. in the urban areas. While the survey revealed that the ST households were more likely to be excluded, discussions revealed that particularly in villages with mixture of communities, the SC households were vocal about difficulties faced by them in accessing information. While the feeling among them was that the other caste communities did not in general want them to access services to improve their standard of living, they were also the only group that shared anecdotes of being actively denied access to administrative work, welfare schemes, etc including RSBY.

Households that lived close to a primary health centre (<5km), and those where at least one member participated in local/regional politics were more likely to be aware. Households with members who infrequently/seldom travelled to the taluka headquarters were more likely to be excluded, also reflecting the importance of local political participation. Households with access to MGNREGS and other schemes were more likely to be aware of this scheme as well. Being a leader or following one was stated to be a key factor for accessing services. In fact, having political contacts and support was found to be the single most important factor that overshadowed other variables mentioned earlier. For instance,

*"Listen I give you one example. A new temple was constructed in our village. The MLA\* belonged to the SC community. He entered directly and there was no problem. Another SC person entered and they beat him up. You understand? there is some of this type of discrimination."- FGD\_BR\_R1*

\*(MLA – Member of the legislative assembly)

Within the community, the local politics play an important role in determining who gets to know of the welfare measures and who gets excluded. People who follow the political leaders or are considered to be 'useful' by them like the educated, the rich, those with community support, etc are most likely to procure information about different welfare measures and get benefits. Another factor which determines who gets the information and benefits is the local village/GP level politics. Most schemes are implemented through the GP while its members act as the intermediaries between the government and the community. Often they decide who gets included in the schemes based on their own rationale like friends/relatives, other social/political contacts, 'useful' individuals, etc. The GP officials often use the schemes as a negotiating point with the community. For instance, they insist on clearing any dues to the GP office before giving information about the schemes, payment in exchange of information, etc.

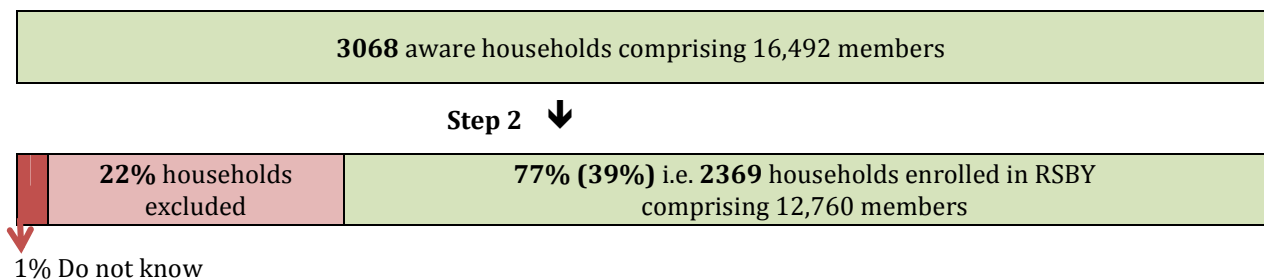
The economically poor, daily wage earners and uneducated/illiterate groups overlap considerably and due to their economic condition need to work every day, and hence are concerned primarily with their own work. They are not available in the village/area for most of the day, do not concern themselves much with the activities/issues in the village/area, and do not network with administrative/political contacts. This behaviour makes them seen as not 'useful' by the GP/political leaders, and hence the local administrators often ignore these households. Those with money were also well-dressed (mentioned above), had support of others in the area/village, had political contacts, and were able to spend money to gain information and get their own names added to lists that allowed them access to various welfare schemes including RSBY.

Most of the mechanisms boil down to the level of the GP & local health workers/volunteers who are used by insurance companies/TPAs to disseminate information about the scheme. Few respondents reported that the organisers themselves had shared slips (tokens for the camp) with the eligible households one week to one month prior to the camp but except a handful, none received information about the scheme instead were informed only about the camp schedule and venue.

## STEP 2: EXCLUSION OF HOUSEHOLDS FROM ENROLMENT IN RSBY

Step 2 was concerned with exclusion of aware households from being enrolled in RSBY. Enrolment in RSBY occurs at the household level and at an enrolment camp organised by the concerned insurance company in partnership with the government agency once a year at the village/area itself or GP headquarter.

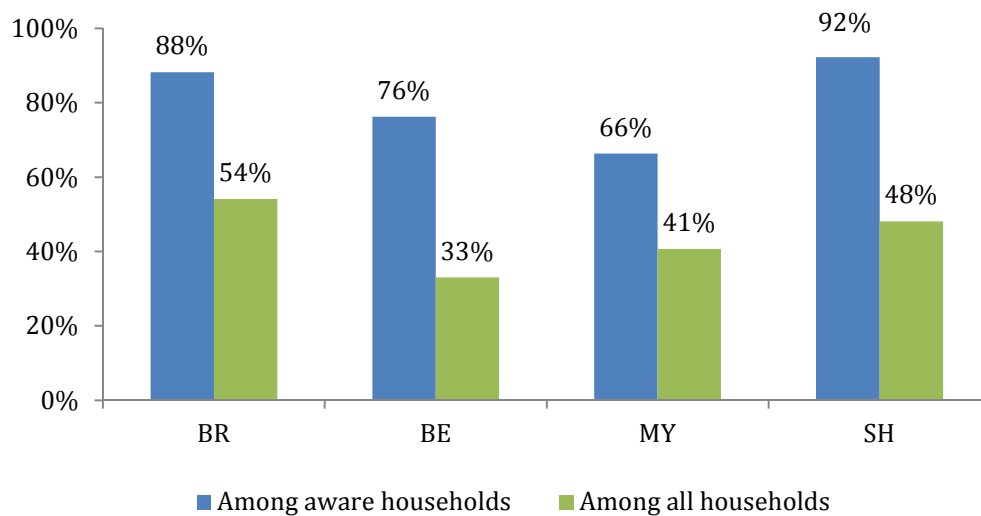
### Part 1: At the household level



As seen above, 77% aware households enrolled in RSBY i.e. 39% of the total 6040 households. This is comparable to the official enrolment figure for the state, which stood at 41% for the year 2012-13. This was significantly higher at 87% (44%) in urban areas, and the overall rates for ranged between 33-54%

across the four sites as seen in the figure below, again similar to the official figures for the corresponding districts.

**Figure 17. Distribution of enrolled households across the sites**



In rural areas this was the second year of implementation of RSBY, however only 12% reported that they had been enrolled before in RSBY. Of these, nearly half (42%) had not used the scheme before but still were motivated to be a part of it while another quarter (26%) had been advised by someone (GP/government functionary, health volunteer/worker, friends or relatives) to re-enrol.

#### ENROLMENT PROCESS EXPERIENCED BY THE ENROLLED HOUSEHOLDS (N=2369)

The enrolment process began in Oct 2011 across the state and ended in Mar 2012. 31% of the enrolled households were enrolled as early as Oct-Dec 2011 while 60% were enrolled between Jan-Mar 2012. Nearly two-thirds of rural households reported that the camp was held at the GP headquarter or in their own village (63%), the former being more common. The rest reported that enrolment was conducted at the nearest school, temple, *anganwadi*<sup>4</sup>, etc. In urban areas, 39% reported that the camp was organised within their wards or in their community hall, while 34% reported that it was held at a nearby ward/area.

Similar to awareness, the main informant was the GP/ municipal functionaries (45%) along with local health volunteers/workers (20%). 53% of urban households reported receiving information about the enrolment camp through word of mouth.

#### Process at the enrolment camp

At the enrolment camp by paying Rs.30, ideally up to five members of a household should be able to register their names, digital photographs and thumbprints on a smart card (the latter two are taken on the spot by the organisers). The card is then printed on the spot authorised by the local field key officer, and issued to the family along with an information booklet containing details of empanelled hospitals in the district where the scheme can be utilised.

While 97% of the enrolled households reported that both thumbprints and photographs were taken at the camp itself, only 11% received the hospital information booklet overall except in Shimoga where nearly half of the enrolled households received it (42% in rural and 60% in urban). 84% of those who did not receive the booklet either did not know about it or were not given any by the organisers. Only one-tenth

<sup>4</sup> Government pre-schools where children and pregnant women are also provided supplementary nutrition

(12%) of the enrolled households reported paying more than the usual fee for getting enrolled at amount excess by Rs.10-250 (median Rs.250). Most admitted making these payments to the organisers at the camp, while very few paid extra to the local GP/government functionaries.

Only 8% of the enrolled households reported that the process of enrolment was conducted as per the guidelines (similar in rural and urban areas). In Shimoga this was the highest at 15% of households, while in the others it was 5% or lesser, again reflecting a better quality of organising camps/services. In urban areas however 12% also reported poor experiences where only names were recorded and excess payment demanded.

## SOCIAL EXCLUSION AT STEP 2

### The beneficiaries' perspective

Nearly half of those that were excluded i.e. not enrolled reported that they were not aware of the camp being organised, while 14% stated that they were not aware of the details of the scheme and hence did not seek enrolment in the same. A few more camp related reasons were cited like their names not being on the list (4%) according to the organisers, and long queues at the camp turned away 20% of households in Belgaum urban. Discussions across the sites revealed that the GP/local council was provided the list of eligible beneficiaries as late as a week or a day prior to the camp itself. In some discussions, the planning for the camps was reported to be significantly lacking with those available on the day of the camp and around the venue being conveniently contacted and enrolled.

Other key variables across the SPEC dimensions found to be strongly associated with exclusion at this step are summarised in the table and discussed in detail below:

**Table 16. Key SPEC variables associated with exclusion at step 1 identified by the survey**

		Z score	p value
<b>Social</b>			
Head of household	Woman	3.5913	<0.001
	Being literate	-3.0707	<0.01
	Never having gone to school	3.8138	<0.001
Social categories	Scheduled caste (SC)	4.7841	<0.001
	Scheduled tribe (ST)	5.1424	<0.001
<b>Economic</b>			
Household member migrating for work		2.3961	0.02
MGNREGS card holder		-3.5707	0.004
Having access to other schemes		3.5421	<0.001
<b>Political</b>			
Infrequent/nil visits to the taluka headquarters		17.5518	<0.001

The profile of the head of household again played a key role in determining exclusion as shown in the table above influenced by gender and education.

*"People like daily wage earners... they work on the same day and earn money on the same day for their living such people will not come..."* FKO\_BR\_R2

The economically poor including farmers and daily wage labourers who depended on daily income for subsistence again often did not prioritise such activities, or could not attend despite intent. Others out at work when the camp was organised and migrated for work were another group that missed being enrolled. Due to adverse past experiences of hospitals not accepting the card due to various reasons, the card has developed a reputation of not having much use, hence, of low priority to those with limited resources or time.

As mentioned above, not being aware of the camp was the main reason for many households to not be enrolled. Discussion with community revealed that the information often comes first to the GP/local council, and then they are expected to disseminate the information to others at times using the help of the local health volunteer/worker. However they often share the information only with others whom they favour like their social or political contacts, friends/relatives, or even on payment of money. Many perceive that this role of the GP as an 'additional' responsibility and do not hold them accountable in such situations. Those who do raise their voice and threaten to complain are provided access to such services by the GP to avoid any trouble. Most economically poor households, or daily wage earners and farmers again being out at work daily, were not available to receive information about the camp or during the camp itself. Generally they perceived that their voice was often ignored or unheard by the local administrators/political leaders, and if they did ever raise their voice in protest for being excluded then they were again ignored or suppressed.

Another mechanism by which the GP/government functionaries at the village level are able to filter the information & benefits is by often demanding money in exchange for access. Those who cannot afford to or do not believe that the scheme's benefits weigh more than this cost, do not approach them. This is not viewed as corruption by the locals but as a means to collect money that had been spent formally or informally by the GP members i.e. the elected representatives in order to be elected to that position. The feeling among the community remains mixed about this behaviour of their representatives seemingly justified to themselves as explained above but unjust to others. Overall the GP was seen as just another administrative body that no longer felt accountable to its electorate.

Just like earlier networking social/political was reported as a favourable behaviour to gain access to such services. The wealthier households and politically powerful were reported to have used money or their status to modify lists to avail such benefits targeting the poor. Interestingly while SC and ST households were more likely to be excluded, ST households with political contacts/affiliations were able to overcome this and gain access to information and services. However it was reported in a couple of discussions that the SC community was not allowed to participate in such networks and while SC households with political affiliations did better than other SC households, when compared to other social categories they still face a lot of discrimination and slower processes.

Households with MGNREGS cards were more likely to be enrolled as well since MGNREGS work involves frequenting local GP office and maintaining many contacts. Otherwise households with other schemes/insurances were less likely to also enrol in RSBY. This was reported to be due confusion of the different schemes, cards and processes, or due to adverse experience with government schemes in general leading them to skip this opportunity.

Confusion over duration of validity of the RSBY card also led to some previously enrolled households to miss enrolment this year. A health worker who mistakenly informed her contacts that these cards had lifetime validity led to an entire village beneficiaries not enrolling.

### **The organisers' perspective**

While the mechanisms that influence access to information regarding camps and being enrolled are discussed in detail above, interaction with GP members and FKO's revealed that most of them were not aware of the scheme and their role in organising and monitoring the enrolment camp.

*“The people who came to take photo graph told that they will send it later; I did not know that cards should be given on the same day.” FKO\_BR\_R1*

As mentioned earlier, most of the times the GP/council members were informed of the camp only and provided the list of eligible beneficiaries as late as a week to a day before the camp with instructions of merely gathering them at a particular venue. In some areas, a number was suggested as the limit for gathering people between 30 to 40 households in a GP on a particular day irrespective of who was called. The local administrators expressed their helplessness in organising a camp in such short notice. This was overcome hence by contacting those who resided around their office, those who frequented their office and their own contacts. They emphasised that this was not undertaken to exclude any specific household but a result of limited time and preparation.

The list provided to the FKO/GP/council members were also ridden with significant errors. Few errors pointed out were that the list often included households that did not reside in the concerned area or no longer resided there, presence of only first names of the head of households making it difficult and at times nearly impossible to identify the right beneficiary household since names are often common in a given neighbourhood.

Organisers very often did not know the local language and made communication difficult. Difference in spellings on the list or mispronunciations led them at times to deny beneficiaries from enrolling as the name they stated was not found on the list.

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**STEP 3: EXCLUSION FROM RECEIVING A RSBY CARD**

Step 3 was concerned with exclusion of enrolled households from receiving cards. Ideally all enrolled households are supposed to receive a card at the camp itself and is a key part of the enrolment process. However it was found in the field that despite enrolment, households faced exclusion at this step as well, and hence it is discussed as a separate step.

**Part 1: At the household level**

**2369** enrolled households comprising 12,760 members

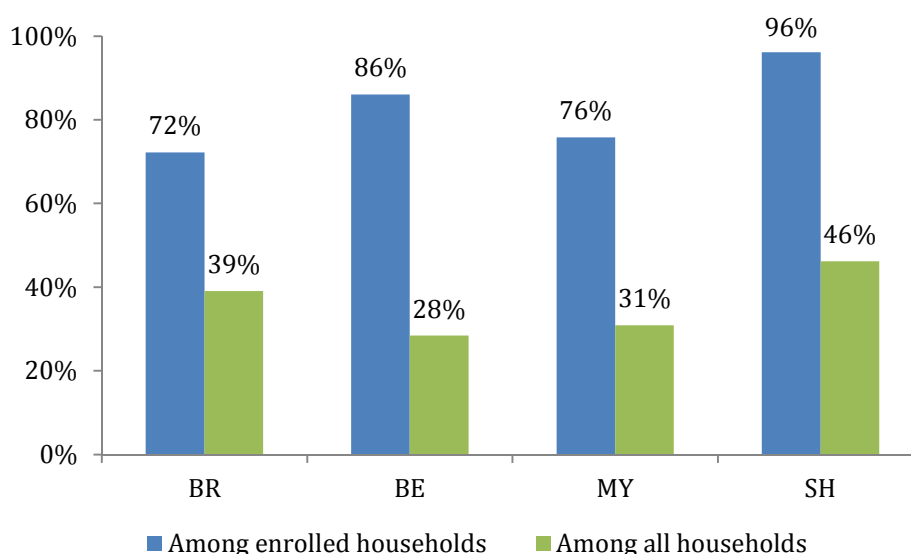
**Step 3** ↓

<b>16%</b> households excluded*	<b>84% (38%)</b> i.e. <b>1988</b> households aware about RSBY comprising 10,710 members
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\*0.3% does not know

The distribution of households that received card across the districts is shown below with the figures in Shimoga again reflecting better implementation of the RSBY camp. The figures were higher in the urban areas in particular.

**Figure 18. Distribution of enrolled households that received a card across the sites**



### EXPERIENCE OF ENROLLED HOUSEHOLDS THAT RECEIVED THE RSBY CARD (N=1988)

Only 24% of the enrolled households received the card at the enrolment camp as per the guidelines as low as 3% in Bangalore rural and as high as 30-35% in Mysore and Shimoga. Nearly half of the households (53%) got their card within a month and 6% of the households received it more than three months following the camp.

This implied that only 2% of enrolled households reported that the enrolment camp was conducted as per guidelines explained earlier and received a card at the camp itself, reflecting the picture of how enrolment camps are conducted compared to their design. RSBY also by design provides the possibility of procuring split cards for any household.<sup>5</sup> 2% of households with cards had procured split cards for family members.

### SOCIAL EXCLUSION AT STEP 3

#### The beneficiaries' perspective

Two-thirds (75%) of the excluded households that did not receive the card had been informed by the organisers that they would receive the card later but eventually did not. This was as high as 92% among the urban excluded. Only 2% of the households reported that technical problems with the smart card printer occurred that led to them not receiving a card.

Other key variables across the SPEC dimensions found to be strongly associated with exclusion at this step are summarised in the table and discussed in detail below:

**Table 17. Key SPEC variables associated with exclusion at step 1 identified by the survey**

		Z score	p value
<b>Social</b>			
Head of	Woman	2.2961	0.02

<sup>5</sup> Split cards are issued to households in case a member of the household travels to another location for work or other reason, and enables them to use the card simultaneously in another location. The total amount of coverage Rs.30,000 is not increased, but the amount is split into two parts, one for each card.

household	Widow	3.5943	<0.001
<b>Economic</b>			
MGNREGS card holder		-4.4987	<0.001
Having access to other schemes		2.1664	0.03
<b>Political</b>			
Frequent visits to the taluka headquarters		-3.2906	0.001
Nil participation in local/regional politics		17.5006	<0.001
Expressed that they were forced to vote		3.3482	<0.001

After the enrolment camps, the cards were most often sent to the GP office and they were responsible to distribute them to the respective households. At many places it was seen that the cards continued to be stored at the office and had not been distributed.

With time, many of the households did not follow-up on the card at the GP. The scheme/card is perceived in many villages/areas to not be of much use, and this led to many not actively seeking to get the card. Most of the households that had received the card had been contacted by the GP/council members or local health volunteer/worker and given the card. Very few had actually sought it out.

*“Even after 3 to 5 months the card is not given to us. If we ask, they will say ‘We will give it to you when it comes, go now, why are you forcing us so much? Will we keep it pending if it has come? Will we eat the card? Will we keep it with us if it comes? If it comes we will give it to you. Go now, do not argue with us’ This is their reply.” FGD\_BR\_R6*

Key reasons for the scheme/card to acquire such an image had been the lack of information that was available to the beneficiaries about the benefits of the scheme but more importantly as seen in the last section, the lack of information on where to go (empanelled hospital information list) and whom to ask in case of queries or problems since even the local coordinators lacked this information.

In some instances, both GP members and beneficiaries responded that the GP used the RSBY card as a means to collect pending taxes. Those who could not pay up were not given the card as a penalty. Participation in local politics again played a role with households that stayed away from politics, or had members that seldom-frequented taluka headquarters were more likely to be excluded. A few households that expressed that they had been forced to vote were also found to more likely not have received cards, again reflecting that political support and power influenced who received the card and who did not. Similar to enrolment camp, the wealthy along with social and political contacts are favoured by GP/council members, and hence are contacted and given the cards immediately. Some reported that beneficiaries at times were asked for money in exchange for having the cards to the beneficiaries. A few also believed that the GP/council members or office that had received the cards, had at times kept the card for personal use but how this would occur was uncertain.

The profile of the head of household once again influenced the likelihood of the enrolled household receiving the card based on gender and marital status as shown in the table above. MGNREGS beneficiary households were more likely to receive the card like earlier while those with access to other schemes/insurances were less likely to get it again due to the confusion over which card is used for what. Some of the households reported having confused the RSBY card with *aadhaar* card (unique identity card), ration card, etc, and were unsure of which card they had enrolled for, hence uncertain of what they were or were not eligible for.

## The organisers' perspectives

The GP/council members and FKO were often not aware of the processes and guidelines of implementation of the scheme. Many reported that they were not aware that the cards were to be issued on the same day as per the guidelines. At some places, the verification card given to the FKOs was taken by the camp organizers with a promise to return it later. A few camps had power failure or the smart card printer breakdown due to which the cards could not be given at the camp itself.

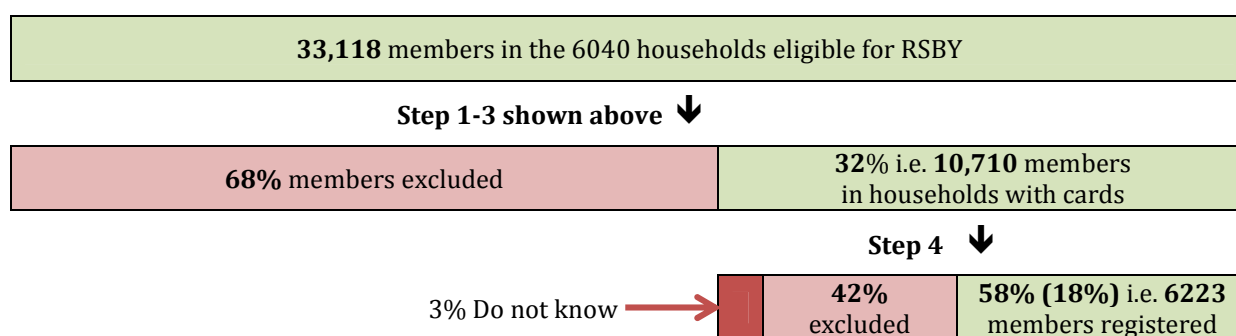
When the cards arrived, errors with the information on the cards also did not allow all the cards to be distributed to the beneficiaries like repetition of some names, photograph and names not matching on the card, etc.

During the interaction with the local health volunteers/workers and FKOs, it was often reported that they were not paid the incentives that they were assured for mobilizing the people to attend the camp. This demotivated them to actively distribute cards by visiting the houses of the beneficiaries. Others who did receive the incentives (Rs.2 per beneficiary) were dissatisfied with the amount and at times found it inadequate for investing time and effort in visiting houses to distribute the cards. The research team noticed that cards were often stored at the GP office or *anganwadi*.

### STEP 4: EXCLUSION OF MEMBERS OF CARDHOLDING HOUSEHOLDS FROM BEING REGISTERED ON THE CARD (N=10,710)

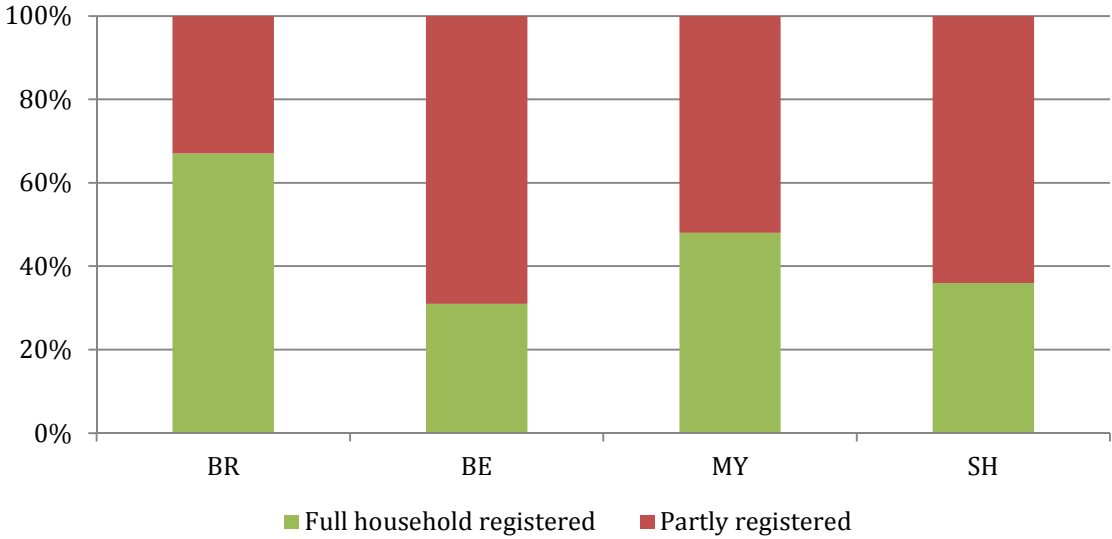
The findings are now discussed at the level of the individual household members. As seen in step 4, only 58% of the household members belonging to cardholding households were registered on the card available in their household. This implies that despite the presence of the RSBY card in the household, only 58% members were able to use the scheme and hence protected. On an average hence, 3.1 members were enrolled on one card i.e. in one household. In urban areas, the variation across the sites was high ranging from around 30% to 80%.

#### Part 2: At the individual member's level



As per the guidelines, up to five members can be registered on each card. Hence in larger households the design already excluded the other members by default. Of the 1032 households with a size of five or less, and cards, only half (48%) of them had registered all the household members on the card. This ranged from 31 to 63% across the sites as shown in the figure below. This reflects that for whatever reason, a household with five or less members need not be fully covered by mere presence of a card. Among the larger households also, only 12% of the households enrolled five members.

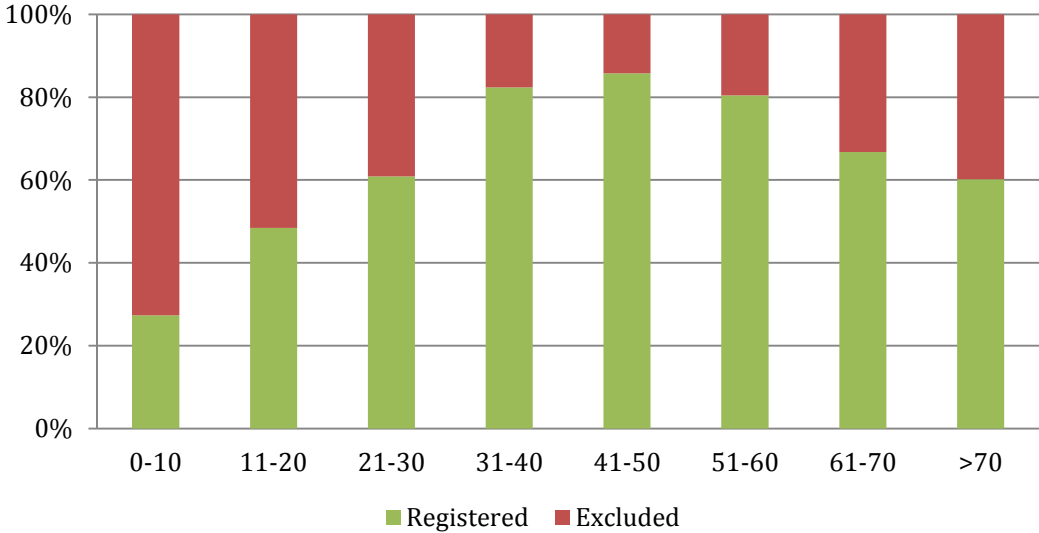
**Figure 19. Distribution of fully registered cardholding households (size 5 or less) across the four sites (n=1032)**



**REGISTERED MEMBERS IN CARDHOLDING HOUSEHOLDS (N=6223)**

The household members that registered on the card were more likely to be the head of household and his/her spouse followed by the parents and children of the head. Most registered belonged to the 32-60 years age range, and a male dominance was noted.

**Table 18. Distribution of registered members across age groups (n=6223)**



Interestingly members that had never attended school and/or were manual labourers were more likely to be registered. This corresponded to the profile of the head of household and spouse, and hence explained the findings. The relation to the head of household hence appeared to be the key variable defining possible exclusion.

## SOCIAL EXCLUSION AT STEP 4

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*“No... they just took only one person’s photo. They said, only one person is enough. No need of other members of the family, it is sufficient one person from one family.”- FGD\_BR\_U2*

A key reason for not registering all the household members (up to five in number) was lack of awareness and clarity on the enrolment process itself both by the beneficiaries and the organisers. The various discussions revealed that most often households were misinformed about either the number of members from each household that could be covered under the card, or that only the head of the household was needed to attend camp in order to get the entire household covered. A few households had been incorrectly informed that children were not allowed to enrol or babies could not be photographed, and were not registered, and hence not covered.

Other key SPEC variables that were strongly associated with exclusion at this step are mentioned in the table below:

	<b>Z score</b>	<b>p value</b>
Female gender	3.1287	<0.01
Age < 15 years	33.3079	<0.05
Students in productive age group	24.996	<0.05
Manual labourer occupation	-16.645	<0.05
Never having gone to school	-15.481	<0.05
Never married	31.613	<0.05

The commonest reason for not registering during the enrolment camp was being out of station at the time of the camp. This was due to work more often followed by school and other social engagements. In most places, camp date was announced a few weeks earlier, and the camp was conducted on that specific day only. People who were able to attend the camp got themselves enrolled but many still did not attend the camp.

Most economically poor households esp. those of farmers and daily wage earners did not stay back for the camp despite knowing the date of the camp. They prioritise their daily wages above any other activities as it affects the livelihood of their family. This focus leads them to have less concern for networking with social/political groups, and are often find sacrificing the current day’s income for potential but uncertain benefits from some scheme meaningless.

Long queues at the enrolment camp esp. in urban camps, at times turned away members who found it difficult to wait for long like the elderly, those with some physical disability and for unknown reason, widows.

### **Intra-household exclusion**

*“It will be wrong if we do not take care of them. Our parents have taken care of us and I their old age we have to take care of them.”-FGD\_BR\_R1*

In larger households with more than 5 members, families are able to register five members only, and hence need to select among different members. This type of exclusion where a household excludes certain members intentionally is called intra-household exclusion, and is a direct result of the design of the scheme. When faced with such situation, the elders or parents were almost always preferred at the cost of younger children. The reasons provided for this were multiple – it is seen as duty of the children (in this case the head and spouse) to take care of their parents in their old age (a social norm in villages

particularly), a sign of respect; households prefer to enrol the more knowledgeable as their capacity to comprehend and share information with others is higher; and because they are more vulnerable to falling ill. The younger ones were conversely viewed as being healthy and less likely to fall ill and hence were excluded. Some respondents opined that the educated and active members should be excluded as they are able to take care of themselves and hence the vulnerable members should be registered on the card when faced with such decisions within a household.

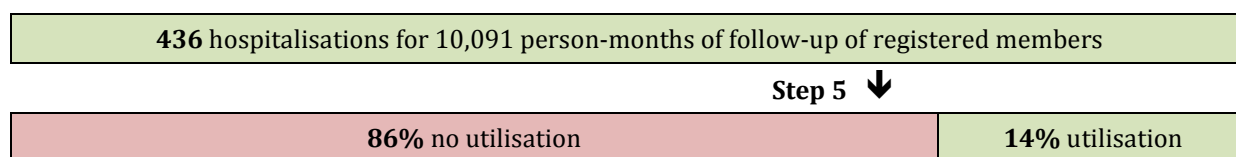
Interestingly taking advantage of the multiple schemes available to them, some households tried covering different members under different schemes based on their inclusion criteria or eligibility. For instance, if a scheme for women and children provides them some benefits already then they are excluded from registering on RSBY card to allow other members some cover.

## STEP 5: EXCLUSION FROM UTILISING RSBY

All the households were followed up between July and December 2012 for a total of 7.4 household-months i.e. 53,705 person-months' worth of information was collected. 1357 hospitalisations were reported in this period. Assuming the rate of hospitalisations remained the same for the remaining months, the total number of hospitalisations was 2201. The annual rate for hospitalisation in the overall population was 41 per 1000 members. This is significantly higher than the average community hospitalisation rate for state, which stands at 24 per 1000 (2004). This is expected as the RSBY eligible population comprises of those living below or just above the poverty line. This population as explained earlier has poorer health and nutritional status, poorer access to health services and are usually employed in hard physical labour making them more prone to injuries.

Among the registered members, the annual hospitalisation rate was calculated to be 43 per 1000 while that among the non-registered was 34 per 1000. The difference between them was found to be significant ( $Z=9.1782$ ,  $p<0.05$ ) implying that the apparent increase in access to services vis-à-vis hospitalisations was related to their being registered on the RSBY card.

### Part 3: Utilisation of the scheme



## UTILISATION OF RSBY SCHEME

The two groups were comparable in their overall profile including their distribution between rural and urban areas, gender, age group, education, etc. The hospitalisation experiences were compared between the two groups in the table below.

**Table 19. Comparison of hospitalisations between the utilised and excluded groups**

Characteristics		Utilised (n=38)		Excluded (n=231)	
Type of hospital visited	Private*	81%		60%	
	Public*	16%		38%	
Common problems reported		Eye problems/operations	18%	Delivery	14%
		Cardiac problem/chest pain	16%	Fever	11%

		Delivery, uterine problems, fever (each) 8%	Gastric problems 10%
<b>Type of treatment availed</b>	Medical	47%	<b>65%</b>
	Surgical	<b>45%</b>	26%
	Obstetric	8%	9%
<b>Cashless experience</b>		2	6
<b>Direct medical expenditure (in Rs.)</b>	Range	0-26,000	0-250,000
	1 <sup>st</sup> quartile	1250	2500
	Median	5000	6200
	3 <sup>rd</sup> quartile	10,000	15,000

\*Remaining data not available

Both groups visited private providers more than public services. However the proportion that visited public services in the non-users was significantly higher than that in the user groups. In the group discussions, many respondents informed that in case of non-serious illnesses, they usually preferred government hospitals, as the expenditure was comparatively lower. Surgery is usually considered a serious procedure and this was probably a reason for preferring private providers as well. Another explanation provided for this behaviour was that two-third (64%) of the empanelled hospitals in all four districts were private service providers, and hence a comparative higher proportion of private provider use was expected.

Treatment wise the proportion undergoing surgical procedures is nearly double among those that used the card (45%) as compared to those that did not (26%). As explained earlier, surgery is seen as a serious procedure for which beneficiaries may seek care in private setups. However such a large difference is a cause for concern. When this was explored with both beneficiaries and service providers, other reasons stated were for this difference, and are listed below:

- Almost all the private service providers interviewed complained about the pricing for the treatment packages provided by RSBY. They perceive the amount fixed to be insufficient when compared to the market price and for their sustenance. While surgical packages were fixed packages and moderate, the amount for medical admissions was to be calculated based on type of ward admitted to (general or ICU) and number of days admitted. The amount fixed for daily reimbursement was too low and hence, some avoided admitting medical cases under RSBY.
- Since the RSBY eligible households mainly comprised of population that lived below and just above the poverty line, the prevalence of elective surgical cases that remained not operated was high, and with access to RSBY they had now received access to free surgical care. Because of this, the service providers believed, the number of surgical cases was high i.e. due to adverse selection.

## SOCIAL EXCLUSION AT STEP 5

*"The problem that we are facing is that we are not aware for what diseases we can avail treatment from this card, where we can get this treatment and up to what limit we can avail this service."*- FGD\_BR\_R2

The surveys revealed that one-third of the non-users had not visited empanelled hospitals, while a quarter reported that they did not even know that the card could be used for such purposes or where to use the card. Lack of awareness about the details of the scheme and empanelled hospitals as explained in detail above in both step 1 and step 2 were key factors in this step as well. Only 11% of the enrolled households had received the hospital information list as mentioned earlier. Unaware of empanelment status of

hospitals they visited, many respondents reported that hospitals often refused to entertain the card either saying that it would not work in the hospital or that the card did not cover that particular treatment.

Those who knew about the empanelled hospitals reported that many were located in far areas, closer to the town and district headquarter. Beneficiaries from remote villages and difficult to access areas especially find this journey to an empanelled hospital difficult. If the hospital is far, then it was also not a frequently visited hospital. Beneficiaries then hesitated to visit these hospitals and often did not if the cost of transport or time taken to travel was high. For perceived non-serious illnesses, they preferred their regular hospital to an empanelled but far hospital.

Having political or social contacts was reported to be another important reason for determining exclusion at this step. Utilisation of such benefits was usually without any hassle for relatives or contacts of hospital staff. The next group that was able to use their contacts to receive benefits were those who had contacts with social or political networks like women's groups either because they had access to information about the scheme and how to use it, or because they usually themselves had contacts in the hospitals.

*"... I had gone to the hospital on 17<sup>th</sup> of this month, and a patient came for delivery. They had the card, but the delivery had already happened in the ambulance only; the staff just cut the umbilical chord and charged Rs.20,000/- to the card. ... the doctor had not even touched the patient!"-*  
FGD\_BR\_U1

Most of the beneficiaries also reported past experiences and anecdotes of misuse or misbehaviour by service providers. Many times they were informed that there were problems with the card due to which they could not use it. Problems frequently experienced were that names were missing from the card, age, photo or other details not matching, card reader not working, etc. Some respondents provided instances where the hospitals retained the card at admission and returned it at discharge only, some where the card was retained but the patient treated on an out-patient basis and still charged for consultation, and some even when they had minor illnesses were admitted and treated and their card taken.

*"They will not check us first, they will generate a computer bill and then the doctors will check us."-*  
FGD\_BR\_U1

Almost all respondents that had used the card, stated that even if the hospital accepted the card, the treatment was seldom free; the least that would be asked for was medicines to be purchased from outside. Interestingly, some respondents reported that they were aware that hospitals were overcharging them for their stay in paper but taking the regular payment from them i.e. the amount mentioned in the discharge summary or bill did not match the actual payment they had made. All the hospitalisation related documents were always in English and if literate, the patients and bystanders only knew Kannada. Due to this they could not understand this type of discrepancy. When they questioned the hospital authorities, they were told to ignore it stating that it was just an error on paper, or since the patient was not paying the extra amount, they should not bother with such things.

Even during regular discussions the general distrust towards hospitals and doctors in general came across strongly. Repeated refusals by them, irrespective of the reason, made many believe that the card itself was without any use or that the hospital was trying to cheat them yet again.

Most respondents did not feel that this situation was recent or created by the arrival of RSBY but the general situation with most welfare schemes that RSBY did not change.

## LONGITUDINAL DESIGN

As explained in section 3, the Karnataka team adopted a longitudinal design for the household survey. Though this approach was used as a means to overcome the challenge posed by the delays in RSBY, this in turn poses challenges when making cross-case study comparisons. Since the other case studies use a retrospective design for the study, comparison of our findings with them will be difficult. The sample attrition with time was only 4% i.e. 213 households overall.

## RSBY ELIGIBLE LIST

The selection of households for the study was through the RSBY eligible list of households which in turn as explained earlier is a composite of a ten-year-old list i.e. the central RDPR list and a more recent list used for MGNREGS, which is updated regularly. These lists are not mutually exclusive groups and were merged. Hence it is only possible to segregate MGNREGS beneficiaries from the others, and not BPL households from those above the poverty line in the rural list. Any exploration across socio-economic groups relied on data collected during the survey alone.

## SAMPLING

The design and rolling out of RSBY scheme in Karnataka was the main deciding factor for selecting the study districts, with little choice for selection based on the state demographics. This raises a question on the representativeness and generalizability of results to the entire state.

As seen in many 'large-scale' social surveys, the sample size was inadequate to facilitate detailed analysis of population sub-groups that were known to be vulnerable to exclusion like migrants and *devadasis*.<sup>62</sup> Hence additional effort will be needed via nested studies using a predominantly qualitative approach to describe and understand the picture of social exclusion among these groups.

## SURVEY INFLUENCING RSBY UTILIZATION

During the baseline survey and follow up visits, the selected households were given basic information about the RSBY scheme and its benefits. It is possible and quite probable that these visits resulted in better awareness about the scheme that in turn influenced the utilization of the scheme to some extent. This may bias the results to show more favourable response to the scheme, something to be borne in mind when interpreting and exploring the findings post analysis.

Social exclusion is a complex phenomenon. In this study, we started with developing a conceptual framework to guide the methods and analysis. In this report, we described the Indian context focussing on social exclusion in health specifically in Karnataka. The findings from the different quantitative and qualitative methods were brought together in the previous section to provide a picture of the situation in the community of how social exclusionary processes interact with access to RSBY in Karnataka.

Reviewing the literature for social exclusion in health in India, there was a general lack of primary research exploring social exclusion in this sector. Most findings were based on secondary analysis from routine government surveys that merely led to description of the status of known socially excluded groups in India. Studies exploring the performance of health financing schemes tended to focus on the design and implementation of the schemes alone. The other type of literature found significantly were editorials, commentaries and essays that dealt with the concept of social exclusion and usually with a historical approach. Hence, this study fills a void to understand the intersection of social exclusionary processes in society with access to health services enabled by health financing reforms.

The rural study households included MGNREGS beneficiaries & non-MGNREGS households that were BPL, while the urban households comprised only of BPL households. Three-fourth of this group belonged to a backward caste or tribe, hence, eligible to various social and development reforms provided by the government. Markets seem to have enabled penetration of mobile phones and televisions in most of these households though safe water and sanitation are still largely not available despite existing social programmes. The RSBY coverage in these districts has changed in its second year of implementation and based on these preliminary findings, there has not been significant changes in its performance; while the performance in the urban areas is marginally better considering it is in its first year still. Lack of detailed or comprehensive awareness was found to be the main reason for nearly half of the households being excluded from enrolling in the scheme, receiving cards, and finally utilising the scheme. This seems to be crosscutting through all the steps signifying the importance of reaching adequate appropriate information to its beneficiary. Controlling the access to this information gave those who had access to it, significant power that through intent or the lack of it, influenced largely who was included and who was left out. While in the initial steps, all four dimensions played significant roles, as we descended down the SPEC-by-step levels; we see that the political dimensions (associated with social network) started playing the central role. Intra-household exclusion appears at this stage to be a result of the design of the scheme, and needs to be looked into further.

Though all the findings were looked at, there still exists a need for it to be further explored as the understanding of the mechanisms or processes is still considerably lacking. A few key points have emerged from the study so far. First there are government voting identity cards in almost all the households irrespective of any variable but the exclusionary processes from the district level to within the household affect access to RSBY card significantly. The difference between these schemes would help reveal how some schemes are able to overcome exclusion and by what mechanism. Second from the scheme perspective, lack of detailed awareness was revealed to be a key factor influencing exclusion at every step. Hence, the exclusionary processes involved in restricting awareness should be the key focus while developing policy recommendations. Third, in the initial steps the factors influencing exclusion and the mechanisms involved are many while as we descend the reasons and mechanisms for exclusion are fewer in number and more focussed. This implies that developing policy recommendations will be a challenge for the first few steps and hence the next level of analysis i.e. multivariate analysis will help narrow down the focus onto key processes. Fourth, social and political networks, and participation in local politics were identified to remain the centre of all processes across the steps. Exploring these further will help improve our understanding of how and why they have such power. Last but not the least, the GP/council members i.e. local administrators seem to be the weak link, which has the power and authority to ensure access to its citizens, and proximity to the beneficiaries to be able to understand their

vulnerabilities and recognise their need. However the absence of participation in the scheme's design limits their motivation and participation, and must be improved upon if access as a whole is to be improved upon.

The next step is to take these findings further by developing relevant policy recommendations that will be feasible and will still have a significant impact on the exclusionary process targeted.

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**Annexe 1**      **SPEC framework for Karnataka**

**Annexe 2**      **SPEC-by-step tool for Karnataka**

**Annexe 3**      **Data Collection tools**

Annexe 3(a)    Health Inc Karnataka information sheet

Annexe 3(b)    Informed consent sheet

Annexe 3(c)    Form 1 rural (Baseline household survey questionnaire)

Annexe 3(d)    Form 1 urban (Baseline household survey questionnaire)

Annexe 3(e)    Form 2 (Follow-up household survey questionnaire)

Annexe 3(f)    Form 3 (Post-hospitalisation survey questionnaire)