

## **Banking for better health**

*Medisave* for rural women in Karnataka, India

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## Brief description about the partnering institutions

*Achutha Menon Centre for Health Science Studies (AMCHSS)* is the Health Sciences wing of the Sree Chitra Tirunal Institute for Medical Sciences & Technology (SCTIMST). Its main objective is to train health professionals in health research and in formulation and implementation of health policies. The Centre offers an international Master of Public Health (MPH) programme, short courses and Ph.D. programme catering to all South Asian countries. Ministry of Health and Family Welfare, Government of India recognized the AMCHSS as a ‘**centre of excellence**’ for public health training. The Centre comprises of core and visiting faculty in Anthropological Perspectives of Health, Biostatistics, Epidemiology, Environment & Occupational Health, Field Study in Public Health, Gender Issues in Health, Health & Development, Health Economics, Health Management and Health Policy analysis.

*Vijaya Bank* is a nationalized bank under Government of India. The bank has the network of 860 branches spread over 28 states of the country and 4 union territories. Total business of the bank stood as Rs.30,000 crores. The bank has the lead bank responsibility in 3 districts of Mandya, Dharwad and Haveri districts in Karnataka State. It also sponsors a Regional Rural Bank namely Vishveshvaraya Grameena Bank and also a self-employment training institute VIBSETI in Mandya District. They give special attention to women entrepreneurs.

*Centre for Integral Social Action*, a part of the Carmelite Sisters of St. Teresa, is involved in empowering women (especially dalit women) and children through literacy and awareness programmes, self help groups, and women’s groups. The centre also dispenses medicines for common ailments. The Centre has started 60 women’s self help groups in Haveri district.

*Paripoorna Grameena Abhivruddi Mahila Seva Samsthe* is a registered voluntary organisation working for the welfare of the weaker sections in rural and urban areas of Dharwad district in Karnataka. So far, it has formed self help groups in 15 villages. The organisation, in the past, has worked against the violence against women, alcoholism, rape, and dowry.

*S. B. Education Trust*, besides running educational institutions such as computer centres, industrial training institute, teachers training institute, and a pre-university college, is involved in ayurvedic plant development, rural development, empowerment of women through employment generation, health education, formation of self help groups, and conduct of blood donation camps.

## About the team

*Dr. D. Varatharajan*, a Health Economist, was the principal investigator of the project. Besides teaching health economics and health policy analysis courses to MPH students during 1997-2006, he has been involved in research (as a researcher and supervisor) and consultancy in three specialties viz., health economics, health policy analysis and health system for over 16 years.

*Dr. M. Murali Kannan*, an Economic Analyst, was the lead person from the bank side. He specializes in monetary economics. His basic expertise lies in corporate planning, new banking products, and transfer price mechanism.

*Ms. Saji S. Gopalan*, an Economist, was the research associate. She specializes in health economics, particularly in the area of financing non-pregnancy care of the women.

*Ms. Jayalakshmi*, a Social Worker, represented the NGO side and was in charge of the project in Dharwad district. She has been in the field of microfinance for over 8 years. She is directly involved in the formation of self help groups in 15 villages of Dharwad district. She has won several laurels for her service to the women in the chosen area. She and her organisation also have experience in conducting surveys among rural women.

*Sr. Agnes Clare*, a Social Worker, represented the NGO side and was in charge of the project in Haveri district. She has been in the field of women's empowerment for more than 20 years. She is currently involved in the delivery of health care to women as well as in the formation of self help groups in the Haveri district. She has also been involved in evaluation studies concerning nutrition programmes in schools.

*Ms. Meera Shivalingiah*, a Social Worker, also represented the NGO side and was in charge of the project in Mandhya district. She has been actively involved in women's empowerment through employment. She and her NGO are directly involved in the small scale production activities for the purpose of empowering women. She was also involved in blood donations and community health education.

*Dr. P. Sankara Sarma*, a Biostatistician, provided statistical inputs. Besides teaching the courses such as Quantitative methods in Health Research and Intermediate Biostatistics for the MPH programme, he is conducting research and supervising students in the area of applied biostatistics.

*Dr. Mala Ramanathan*, a gender specialist, was the consultant to this project and contributed in the area of women's health. She has been involved in several studies on women's health and ethical issues besides teaching MPH courses such as Gender issues in health, Making pregnancies safer, Anthropological perspectives of health, Qualitative research methodology and Ethics in public health research.

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This has been a collaborative project with an active participation of three other organizations in Karnataka viz., Paripoorna Grameena Abhivruddi Mahila Seva Samsthe, Dharwar, Sneha Sadana, Society of the Carmelite Sisters of St. Teresa, Haveri, and S. B. Education Trust, Mandhya. At this point, we would like to thank these organizations for all their hard work and enthusiasm throughout the project period.

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We were able to frequently step into Dr. Sundari Ravindran's office for technical support. Her revisions of the survey instrument and comments on the draft report were very helpful. Thank you, Dr. Sundari.

Dr. Vinod Annigeri offered spontaneous assistance when we approached him for review and translation of the survey instrument. Being an expert from the same region, we really appreciate his timely help and comments during the Dissemination Workshop and on an earlier draft of this report.

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Our sincere thanks are also due to the advisory board members and the local communities for their constant support and encouragement throughout the project. The project also benefitted largely from the services offered by the designated physicians and the hospitals. Without their dedicated service and support, the project would not have been successful. We really thank them for their consent to serve the project and their excellent service to the project clients at a reasonable price.

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## 1. INTRODUCTION

Achieving universal access<sup>1</sup> (adequacy of care and extent of population coverage) to health care is regarded as the fundamental goal of any national health system.<sup>1</sup> Attainment of this goal depends on how well disadvantaged populations such as women, the poor, and rural inhabitants are targeted and reached. There are differences in opportunities and resources available between them and the advantaged groups; women, in particular, suffer from multiple disadvantages.<sup>2</sup> Financial exclusion is a major barrier preventing many of them from obtaining essential health care.<sup>2-8</sup> Resource needs are greater for women because they are expected to live longer and have maternal health care needs to be fulfilled. Maternal health care costs, especially when complications occur, can be very expensive and catastrophic with a potential to force a household into poverty or risky coping strategies.<sup>4,7</sup> Yet, there are critical gaps, particularly in low-income countries, in resources available to women compared to men, and in their ability to make decision to seek health care when in need.<sup>2</sup>

Millions of women die each year from causes which are largely preventable and treatable, and majority of such deaths occur in low-income countries particularly in Asia and Africa; 99% of the maternal deaths every year occur in these countries. India alone accounts for 21.8% of them.<sup>9</sup> In addition to maternal deaths, Indian women also suffer from other ailments such as malaria, hypertension, coronary heart diseases, tuberculosis, and fever. For instance, the estimated prevalence of blindness among Indian women in 2004 was 12.2 (10.2 for men) per 1,000 population.<sup>10</sup> Similarly, prevalence of diseases like malaria, hypertension, cancer and diarrhoea is higher among women.<sup>11</sup> These conditions affecting women demand increasingly higher share of resources as the life expectancy increases.

Due to inadequate attention from the government and other pooled sources of health financing, women often seek resources from within the household or from other financing sources. However, the gender power structure within the household does not give enough financial autonomy and decision making power to women so as to seek adequate health care.<sup>12</sup> As a result, women are exposed to inadequate and inequitable patterns of health financing and health care utilization. Hence, one of the major challenges of national health financing systems is to develop systems that protect disadvantaged people such as women against the financial risks of obtaining health care - to allow them to seek needed care without the risks of financial catastrophe and impoverishment. This requires a multi-sectoral and multi-stakeholder partnership, as advocated by the World Health Report 2008 and the report of the Commission on Social Determinants of Health.<sup>13-14</sup>

### 1.1 Out-of-pocket spending - a major challenge

A major impediment in the process of developing national health systems towards attaining financial risk protection and universal health care, particularly in many low- and middle-income countries, is the household out-of-pocket spending (OOPs) made at the point of delivery of health care service. It adversely affects the poor and pushes them towards expensive and impoverishing coping mechanisms such as high-interest loans, distress selling of assets, and reducing consumption of food.<sup>15-18</sup> Each year,

<sup>a</sup> *Every one in the population has access at an affordable cost to promotive, preventive, curative and rehabilitative health interventions.*

around 150 million individuals suffer severe financial hardship simply as a result of seeking care and having to pay for the services they receive;<sup>19</sup> approximately 100 million people are pushed under the poverty line as a result of OOPs. These figures are worrying enough, but they exclude people who suffer financial hardship because they are unable to seek care and suffer extended period of ill-health as a result.

Out-of-pocket spending is also the most unorganised and inequitable form of health spending. Yet, it still continues to be the dominant health financing mechanism in many low- and middle-income countries.<sup>11,16-17,20-30</sup> More importantly, the problem of OOPs is the severest in the least developed countries and vice versa (Table-1). However, it should be noted here that the financial catastrophe and impoverishment are not uncommon in middle- and high-income countries (due to the existence of co-payments for health services in various forms) even though their incidence is generally higher in low-income countries.

**Table-1**  
**Sources of health spending (2006)<sup>20</sup>**

Countries	Total Health Expenditure (THE)		OOPs (% of private expenditure)	External resources (% of THE)
	% of GDP	Govt. share (% of THE)		
Global	8.7	57.6	49.3	<b>0.4</b>
High-income	11.2	60.7	36.2	<b>0.0</b>
Upper middle-income	6.3	55.1	70.0	<b>0.2</b>
Lower middle-income	4.5	46.2	85.7	<b>0.8</b>
<b>Low-income</b>	<b>4.3</b>	<b>36.2</b>	<b>85.4</b>	<b>16.9</b>

## 1.2 Outpatient care - the major contributor

Financing health care provided at the first contact point with the provider is crucial for the attainment of universal access to health care, sustainable health financing, prevention of financial catastrophe, and minimization of wage losses due to future illnesses. Outpatient care more often proves to be the first contact point with the health care provider and therefore, is a key constituent of primary health care. Given the size of unmet health care needs among many disadvantaged populations;<sup>31</sup> facilitation of appropriate health care at the first contact point is central to health system strengthening based on primary health care and to the attainment of MDGs. Out-of-pocket spending on primary health care services, especially by poor women, produces poor health outcomes thus nullifying all the other health system development efforts.

Appropriate and affordable delivery of outpatient care means provision of basic essential care including consultation, early diagnostics, and medicines. As against the expectation that the outpatient care is

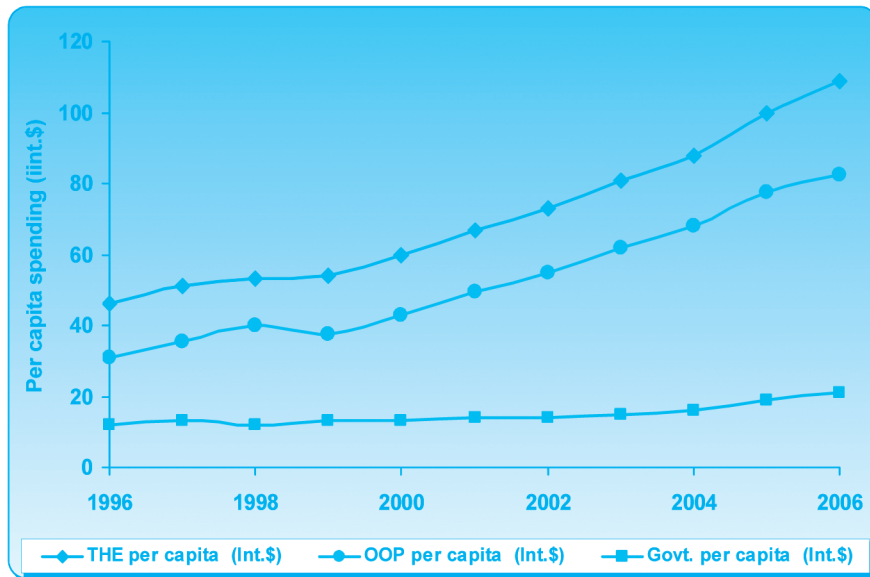


delivered free of cost to the disadvantaged populations and at the least cost to others, in reality, it is the most significant contributor to OOPs in many countries.<sup>11,32-35</sup> Expenditure on outpatient care is small on each occasion, but gets accumulated annually to make it significant. Medicines, in particular, consume a major chunk (50-80%) of outpatient care spending.<sup>11,36-38</sup>

### 1.3 Health financing context in India

In India, households contributed 68.8% (range 36.5% - 91.7% across states) to total health spending in 2003-04.<sup>11</sup> Average per capita OOPs was US\$ 20.65 (1 US\$ = INR 49) ranging between US\$ 4.94 in Meghalaya and US\$ 99.94 in Nagaland;<sup>39</sup> in Karnataka, the per capita household health spending was below the national average at US\$ 14.33. The trend in per capita health spending between 1996 and 2006 (Figure-1) indicates that OOPs contributed almost entirely to the increase in total health spending during this period.

**Figure-1**  
Health spending trend in India, 1996-2006<sup>40</sup>



Outpatient care, which includes services like antenatal care and postnatal care, immunization, and treatment for minor ailments, accounted for 46.2% of the rural household health spending. Over two-third of the OOPs on outpatient care spending emerged from rural households and rural OOPs on outpatient care increased annually at 12.8% since 1995-96. Over 70% of rural deliveries occurred at home in 2005-06; the proportion increasing sharply with the decline in household wealth.<sup>12</sup> It was particularly high among those who did not receive antenatal care and. Over 27% of rural women, with a livebirth in the five years preceding 2005-06, did not receive antenatal care; about 50% received less-than-optimal. Infant mortality rate was the highest among the poorest quintile; only 24% of children from this quintile received all basic vaccinations compared to 71% from the wealthiest quintile. Similarly, families of 40% of rural under-5 children from the lowest quintile did not seek treatment for acute respiratory infections and fever.

## 1.4 Women lack autonomy to seek health care

One of the dominant reasons for not seeking antenatal care and treatment for minor (at times life threatening) ailments was lack of financial access. It prevented at least 26.9% of rural women from delivering in an institution, 20.7% from receiving antenatal care, and 21.7% from seeking treatment when sick.<sup>12</sup> These figures, however, do not include women who received less-than-optimal antenatal care. While poverty is a major reason for financial hardship, lack of autonomy to seek health care and to spend money particularly limit women's health care options. In India, only 26% of women had autonomy to seek health care and 40.9% had autonomy to spend money.

## 1.5 New government initiatives

Although OOPs has been a dominant feature of health financing in India for long, the scenario varies across states because health is a state subject. For instance, OOPs share in total health spending in 2003-04 was 36.5% in Meghalaya, 91.7% in Nagaland, and 70.4% in Karnataka;<sup>11</sup> in fact, only two states reported OOPs share of less than 50%. Similarly, per capita OOPs ranged between US\$ 4.94 in Meghalaya and US\$ 99.94 in Nagaland;<sup>39</sup> it was US\$ 14.33 in Karnataka.

Given that OOPs has been the dominant source of financing in all but two states, certain corrective measures were put in place recently at the national level.<sup>11,41-42</sup> National and state governments in India have acknowledged the twin health financing dangers of low government and high out-of-pocket spending on health. Many recent health financing initiatives in India such as the National Rural Health Mission (NRHM) target higher government spending and greater prepayment in both rural and urban areas.<sup>41-44</sup> Their main emphasis is on strengthening the primary health care infrastructure through public funding. a three-fold increase in public health spending is the declared long-term goal of the national government.<sup>45</sup> Measures such as untied funds and maintenance grants to PHCs, establishment of health and patient welfare societies, provision of staff and client incentives, and public-civil society partnerships attempt 'architectural correction' and resource reallocation so as to help the needy states and populations.

Although prepayment is also given considerable attention, commercial prepayment initiatives in health such as private health insurance have not yielded desirable results so far; the estimated penetration<sup>b</sup> of non-life insurance in 2007 was 0.6% (world average 3.1%) with the density<sup>c</sup> of US\$ 6.20 (world average of US\$ 249.60).<sup>46</sup> Total value of insurance premiums generated in health by both public and private sector insurance companies in 2007-08 was about US\$ 640 million; public sector companies alone accounted for 69.4%. One of the reasons why private insurance companies are not very enthusiastic about health is the claims ratio of about 100%; it was 141% in 2006-07 before coming down to 107% in 2007-08. There are also numerous government initiated community based and targeted health financing schemes for the poor. Most of them are insurance-based prepayment schemes such as the *Rashtriya Swasthya Bima Yojana* (RSBY) or the National Health Insurance Scheme, particularly targeting the spending on hospitalizations and deliveries; details of the scheme are provided in Box-1.

<sup>b</sup> Insurance penetration is measured as ratio (in %) of premium (in US Dollars) to GDP (in US Dollars)

<sup>c</sup> Insurance density is measured as ratio of premium (in US Dollar) to total population

### Box-1

#### Brief description of the RSBY Scheme<sup>48-51</sup>

The objective of the RSBY is to provide protection to BPL households from financial liabilities arising out of health shocks that involve hospitalization; it aims to cover all the Indian districts in a phased manner.

#### Funding

The scheme is funded by the national government with contributions from the state governments and the beneficiaries. The estimated annual premium is about Rs. 750 (US\$ 16) per family to be shared unequally by the national (75% subject to a maximum of Rs. 565 or US\$ 12) and the state (25%) governments; beneficiaries are required to pay only the annual registration fee of Rs. 30/- (US\$ 0.64). While the cost of smart cards is borne by the national government, administrative and other related costs are borne by the respective state governments.

#### Eligibility

Workers engaged in the unorganized sector and belonging to BPL category and their family members (head of household, spouse and up to three dependents) are eligible to become members with no age limit.

#### Benefits

The state governments determine benefits based on an area/people's requirement. However, they are advised to incorporate at least the following minimum benefits:

- Annual sum assured/per family for hospitalization coverage is Rs. 30,000/- (US\$ 638).
- Cashless attendance is provided to cover all covered ailments
- Hospitalization concerning most common illnesses is covered with few exclusions
- All pre-existing illnesses are covered
- Transportation cost (maximum limit/per visit US\$ 2.13; overall limit US\$ 21.28) is reimbursed.

#### Providers

RSBY Provides the participating BPL households with freedom of choice between public (including the existing Employees State Insurance Scheme facilities) and private hospitals. Hospitals have the incentive to provide treatment to large number of beneficiaries as it is paid per beneficiary treated. Even public hospitals have the incentive to treat beneficiaries as the money from the insurer will flow directly to the concerned public hospital which they can use for their own purposes. Insurers, in contrast, will monitor participating hospitals in order to prevent unnecessary procedures or fraud resulting in excessive claims.

#### Insurers

The main implementing agency is the respective state government, which selects the insurer through a competitive bidding process; the insurer is paid premium for each household enrolled for RSBY. Therefore, the insurer has the motivation to enroll as many households as possible from the BPL list. This will expectedly result in better coverage of target beneficiaries.

Overall approach of the national and state governments to prepayment appears to be a segmented one packaging insurance services separately for various sub-sections (for example, the poor) or occupation groups (weavers, truck drivers, construction workers, etc.) of the population. The most recent one focuses on the national government employees and pensioners based on the recommendations of the Sixth Central Pay Commission.<sup>47</sup> The proposed health insurance scheme for the employees is voluntary for the existing employees/pensioners subject to their paying prescribed contribution and compulsory for new employees joining after the introduction of the scheme.

### 1.1.1 *Rashtriya Swasthya Bima Yojana (RSBY)*

A national health insurance scheme of particular interest to this paper is the *Rashtriya Swasthya Bima Yojana (RSBY)* launched by the Ministry of Labour and Employment, Government of India in April 2008 to provide health insurance coverage for Below Poverty Line (BPL) families. Five Indian states have started delivering the RSBY services to their enrollees while nine others have started the enrolment; 8 have initiated the tendering and Memorandum of Understanding processes (with Government of India).<sup>48-51</sup> By the end of May 2009, about six million people were enrolled and 4.60 million smart cards were issued; Karnataka has initiated the RSBY process in 6 districts.

Gujarat was the first state to pilot the scheme in 5 districts covering a population of about 0.45 million;<sup>52</sup> the premium was fixed at INR 634.84 (US\$ 13.50). During the first phase, 327,071 families were covered accounting for 58.1% of BPL families (562,042 families) in the chosen areas. In other words, an estimated total premium of US\$ 4.42 million was generated during the first phase. So far, claims worth US\$ 95,345 (per capita US\$ 120) were made by the enrollees; that is, less than 2.2% of the total premium value was claimed so far and only 0.24% of the enrollees have accessed health care using the NHIS.

### 1.1.2 *State-level initiatives*

Since health is a state subject in India, state governments initiate their own health financing schemes with or without central government participation. In the past, there were numerous state-level government sponsored health financing initiatives concerning the health financing functions viz., resource mobilization, risk protection and purchasing. Major resource mobilization measures were user fee (many states), contracting (many states), political decentralization (Himachal Pradesh, Karnataka, Kerala and Orissa), and industrial (philanthropic) participation (Tamil Nadu). Non-contributory state health insurance (Andhra Pradesh, Karnataka and West Bengal) and community-based health insurance were the key risk protection mechanisms employed by some states while establishment of a medical service corporation for medicine supply (Tamil Nadu followed by Andhra Pradesh, Orissa and Rajasthan), outsourcing (many states), and financial delegation (Gujarat and Tamil Nadu) were some instruments concerning the purchasing function.

All these measures, except the health insurance, covered outpatient care as well. Since many of them are recent measures, their impact is not yet known. Preliminary results indicated that states differed in their performance; utilization of primary health care facilities for outpatient care improved in places where these measures were well implemented.<sup>42</sup>

## 1.6 Project objectives

Article-25 of Universal Declaration of Human Rights adopted and proclaimed by General Assembly in December 1948 states:<sup>53</sup>

*“Every one has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control”*

This project sought to fulfil this basic human right. Merely addressing economic empowerment may not fulfil health care needs of women who may utilize such resources for meeting their day-to-day sustainability needs. Also, given the gender power relations within the households and communities, women and their families do not recognize/value their own health needs unless they are acute or when they cause discomfort for other family members. Given this, making a separate economic provision exclusively for women’s health care needs and encouraging them to save for it has the propensity to facilitate a process of prioritizing women’s health needs.

While recent government initiatives produced mixed results, the performance pattern across the states indicates widening of health care inequality with already better-performing states performing even better and vice versa.<sup>42</sup> Existing bottlenecks pulled many states down so much so that they were not able to utilize the allocated funds. Moreover, introduction of user fee alongside the new measures meant that people would continue to incur OOPs even while accessing public facilities. There are other issues too concerning location of facilities, transport, etc. Therefore, it is necessary to develop alternative mechanisms to enhance health care access.

In this context, an action-based research was undertaken in Karnataka during 2005 - 2007. Overall aim of the project was to empower rural women to access basic health care. Specific objectives were

1. To analyse the health care seeking behaviour of women in the chosen villages
2. To assess the pattern of resource availability and allocation to address women’s health care needs
3. To establish a *medisave* program to address basic health care needs of rural women

Basic premise behind this project was that economic empowerment of women through savings habit enhances their chance to seek medical help for their illnesses. The empowerment, it was hoped, would ultimately prevent rural women from entering the doors of poverty on account of health care costs. The framework was devised in such a way that men did not use women as their fronts and women did not use the funds for purposes other than health care. The approach was to supplement already existing self-help group approach that introduced savings habit and solidarity to women. Our aim was to extend the saving habit to formal banking operations and to fine-tune it to finance health care.

## 2. HEALTH FINANCING CONTEXT IN KARNATAKA

With an estimated population of 57.4 million in 2008, Karnataka is the ninth largest state in India accounting for 5.1% of the national population and 5.8% of national geographical area.<sup>54-56</sup> About two-third of the state population live in rural areas and 20% are poor.

### 2.1 Socioeconomic and health context

Karnataka's human development indicators in 2001 were close to the national average.<sup>56</sup> The projected life expectancy at birth for 2009 is 71.1 years for females (national average 68.1 years) and 66.5 years for males (national average 65.8 years).<sup>57</sup> Still, certain specific health indicators like infant mortality rate (43.2 per 1,000 live births in 2005-06) and under-5 mortality rate (54.7 per 1,000 live births) are better than the national average.<sup>12</sup> Female literacy, in 2005-06, was 62.6% with the average number of completed school years for the women being 3.4 years. About 45% of households lived in unstable houses and 53.5% of them did not have toilet facility while 63.8% still used solid fuel for cooking; over 10% of households did not have access to improved source of water and electricity. About 27% of women, compared to 59.1% of men, were found to read newspapers or magazines at least once a week. Unemployment rate too was 53.7% among women compared to 9.6% among men.

### 2.2 Health care coverage

Even though the basic rural health care infrastructure improved substantially in Karnataka between 1985 and 1996, it still falls short of the national norm in certain aspects (Table-2). In addition, existing infrastructure lacks certain essential facilities like building space, workforce, diagnostics, medicines and supplies. However, all PHCs in Karnataka have proper approach roads, at least a physician, electricity, and regular water supply; 96% of them have telephone facility. Similarly, there is no shortage of multipurpose female health workers in sub-centres.

On the average, 4.8% of rural women report ailments at any point of time compared 4.1% among rural men and 4.2% among urban women.<sup>56</sup> Lack of access to appropriate antenatal and postnatal care and delivery care is considered to be one of the main reasons for maternal mortality in rural Karnataka. Percentage women who received full antenatal care (three antenatal visits and at least one TT and IFA) in Mandhya district (one of the project sites) was as low as 28.7% in 2002. Only 38.5% rural women delivered in institutions in 1998-99 compared to 78.8% among urban women. Over 70% of rural women consumed milk or curd once a week in 1998-99 while 43.8% consumed fruits once a week. About 90% consumed green leafy and other vegetables and 98.3% consumed pulses and greens.

Public expenditure in Karnataka marginally declined from 1% of GSDP in 1990-91 to 0.88% in 2002-03.<sup>56</sup> The share of rural health services in government health expenditure was only about 3% in 2002-03 compared to 44% for urban health services. Only 25% of non-hospital ailments in rural Karnataka received care from government institutions. In 2005-06, 64% of households did not generally use government health care facilities; only 19.9% of women had any contact with a government health worker.<sup>12</sup>

**Table-2**  
**Status of the government primary health care infrastructure in rural Karnataka (2006)<sup>54</sup>**

Health care infrastructure	Type of facility	Number Required <sup>d</sup>	Number in position	Shortage (%)
Community Health Centres (CHCs)	Number of CHCs	302	254	15.9
	Building	254	207	18.5
	Physicians	254	192	24.4
	Surgeons	254	168	33.9
	Paediatricians	254	116	54.3
	Obstetricians & Gynecologists	254	215	15.4
	Pharmacists	254	576	0.0
	Laboratory technicians	254	224	11.8
Primary Health Centres (PHCs)	Number of PHCs	1,211	1,679	0.0
	Building	1,679	1,531	8.8
	Physicians	1,679	2,041	0.0
	Pharmacists	1,679	1,304	22.3
	Laboratory technicians	1,679	1,227	26.9
	Female health worker	1,679	216	87.1
Sub-centres	Number of sub-centres	7,369	8,143	0.0
	Building	8,143	4,460	45.2
	Female health worker	8,143	8,328	0.0

Over 40% of rural deliveries occurred at home and 38.1% were not attended by a skilled personnel. Proportion of home delivery was particularly high among those who did not receive any antenatal care; 26.6% of rural women, with a livebirth in the three years preceding 2005-06 did not receive or received less-than-optimal (at least three visits) antenatal care. Overall, only 29.6% of pregnant women in Karnataka received all recommended types of antenatal care. Infant mortality rate was highest among the poorest quintile; only 24% of children from this quintile received all basic vaccinations compared to 71% from the wealthiest quintile. Similarly, families of 40% of rural under-5 children from the lowest quintile did not seek treatment for acute respiratory infections and fever.

### 2.3 Health financing

Health financing context in Karnataka is similar to the national context. The state health spending is dominated by OOPs to the extent of 70.4% (in 2003-04), the national average is 68.8%.<sup>11,39</sup> Although the share of OOPs in total health expenditure is slightly higher in Karnataka than the national average, per capita OOPs (US\$ 14.33) is 30.6% less than the national average (US\$ 20.65). In other words, total health expenditure in general is low in Karnataka. The share of government health expenditure in

<sup>d</sup> As per 2001 population

GSDP (Gross State Domestic Product) marginally declined from 1% in 1990-91 to 0.88% in 2002-03.<sup>56</sup> This is similar to the national trend. Given the minimal share of rural health services in government health expenditure (3% compared to 44% for urban health services in 2002-03), only 25% of non-hospital ailments in rural Karnataka received care from government institutions.

Limited health care access concerning certain sections of the population and higher share of OOPs are real concerns for the state; they are duly acknowledged by the state government as well. As a follow up, the state government has initiated some health financing schemes like 'Yeshasvini', a novel health insurance programme for farmers (in cooperatives). There are also other recent attempts to provide health insurance cover to specific occupation groups (e.g., *auto rickshaw*<sup>2</sup> drivers) and the urban poor. Microfinance too has added a new dimension, All these schemes are in addition to national level initiatives such as the RSBY.

### 2.3.1 Microfinance

Karnataka uses microfinance as an effective strategy to address the credit needs of the rural poor, particularly women. Self-help groups (SHGs),<sup>3</sup> initially known as 'credit management groups' in the mid 1980s, were first formed in December 1991.<sup>56</sup> Broad objectives of the SHGs are:

- To provide an opportunity and space to develop a vision/mission
- To develop and maintain organizational and financial management systems
- To grow in confidence and skill to manage their lives and to promote their interests in the private and public domain
- To establish linkages required for an institution to function effectively and
- To support its members to become agents of social change.

Target groups of the SHG programmes in the state are:

- Women living below poverty line
- Landless women agricultural labourers
- Women belonging to Scheduled Caste (SC) and Scheduled Tribe (ST)
- Families having alcoholic, drug addict or physically disabled persons.

In addition to numerous private SHG initiatives, government started its own (named 'Stree Shakti' programme) in 2000 with an objective to empower rural women, particularly those

- Living below poverty line
- Belonging to Scheduled Caste (SC) and Scheduled Tribe (ST)
- Agricultural labourers with no ownership of land
- Living with alcoholic, drug addict or physically disabled persons

<sup>e</sup> *Three-wheeler commercial vehicles commonly used for local transport.*

<sup>f</sup> *SHG is a small informal group of 20-25 rural women who meet routinely to conduct 'banking' business. It enables joint responsibility of a community to promote economic cooperation for mutual benefit among its members. Its responsibility starts from planning through implementation, including resource provision.*



While the ‘*Stree Shakti*’ programme focuses on curbing domestic violence and other social issues, SHGs promoted by financial institutions address economic issues like saving, credit and investment and those promoted by NGOs facilitate women’s empowerment. At the end of 2004, there were 2 commercial banks, 20 District Cooperative Banks, 8 Regional Rural Banks, 561 NGOs, and 40,295 *Anganwadi* workers<sup>4</sup> engaged in SHG promotion activities. Overall, an estimated 1,11,511 SHGs existed with a total enrolment of 16,64,824 members.<sup>56</sup> Total amount of savings generated by them was Rs. 2.15 billion (US\$ 48.6 million); 53.8% of the loans disbursed were repaid in 2002. By 2003, 80,457 (72.2%) SHGs were linked to bank credits; 58,046 (52.1%) were trained in credit management and 45,177 (40.5%) in social issues. Although SHGs are found to be financially successful, evidence on empowerment so far is limited. About 88% of the members joined SHGs mainly because they provided them an opportunity and motivation to save money regularly.

Average monthly saving by a SHG member in Karnataka was Rs. 175/- (USD 4.38) in 2003-04.<sup>56</sup> Health was the 5<sup>th</sup> major purpose for which loans were raised in the state accounting for 8,012 loans that were distributed during 2002 amounting to Rs. 10.36 million or US\$ 211,471 (Table-3); about 70% of the loans meant for health purpose were already repaid by the members.

**Table-3**  
**Purpose for which micro loans were raised in Karnataka (2002)<sup>56</sup>**

Purpose	No. of loans	Amount (Rs.)
Food	40,354	6,50,99,160
Crop	26,842	4,56,83,839
Small business	12,574	4,14,68,598
Purchase of cattle	3,416	1,68,68,573
Health	8,012	1,03,62,055
House repair	1,338	48,97,626

<sup>4</sup> *Anganwadi workers are government staff dealing with health and nutrition (also pre-school education needs) of 0-6 year old children, adolescent girls, pregnant women, and nursing mothers.*

### 3. MEDICAL SAVINGS ACCOUNT - A BRIEF DESCRIPTION

Until recently, it was assumed that people living on less than a dollar per day are neither willing nor able to save or to contribute to insurance against the risks they face. In other words, they were described as un-bankable and uninsurable. The situation has changed following the development of microfinance instruments such as micro-credit, micro-savings, and micro-insurance suiting low-income households. The interest in it has grown during the last three decades with an increasing involvement of multilateral and bilateral development agencies, national governments, and non-government (for- and not-for-profit) institutions. Private banks' participation in the activity widened the choice further.

#### 3.1 Microfinance - a gate way for women's empowerment

Microfinance is the provision of broad range of financial services such as savings, credit, money transfers and insurance to poor households/enterprises. Existing in three variants viz., (micro) insurance, savings and credit, it is designed to empower the community and its members. It is a vibrant inter-sectoral process in which the poor gain control over their lives through a voluntary prepayment mechanism totally controlled by the local community. Microfinance groups (20-25 members) act as financial intermediaries and typically start with small savings base (say, Rs. 5,000 or USD 100), rotate (i.e., lend small loans carrying moderate interest) it among their members and link the savings base with rural banks through larger loans (say, Rs. 100,000 or USD 2,000 per group).

Microfinance clients manage their cash flows and apply them to whatever household priority they judge most important for their own welfare. Microfinance allows poor people to protect, diversify, and increase their sources of income, the essential path out of poverty and hunger. The ability to borrow a small amount of money to take advantage of a business opportunity, to pay for school fees, or to bridge a cash-flow gap, can be a first step in breaking the cycle of poverty. Similarly poor households will use a safe, convenient savings account to accumulate enough cash to buy assets such as inventory for a small business enterprise, to fix a leaky roof, to pay for health care, or to send more children to school.

Microfinance matters because it increases the options and the self-confidence of poor households by helping them to expand their enterprises and add others to decrease risks, to smooth consumption, to obtain higher return on investment, to improve management and increase their productivity and incomes to store their excess liquidity safely and obtain returns on their savings, to escape or decrease exploitation by the locally powerful, and to conduct their business with dignity.<sup>58</sup>

Microfinance can be thought of as an option to provide finance to health care.<sup>59</sup> Since banks don't give loans for health purposes, as the person in question may not survive to pay back the loan, newer ideas or arrangements are welcome to fill the gaps. Nevertheless, the process is not automatic as groups, like individuals, may not health care as a priority unless the necessity comes. Using the micro finance arrangements to save for health is a big task. Little is known about its impact on health care financing.

The strength of microfinance lies in its capacity to target the informal resource flow in resource-poor settings particularly among households in the two quintiles above the poorest quintile and in its almost exclusive focus on women. It has made women clients more confident and assertive and thus better

able to confront gender inequities. Evidence from the millions of microfinance clients around the world demonstrates that access to financial services enables poor people to increase their household incomes, build assets, and reduce their vulnerability to the crises that are so much a part of their daily lives.<sup>60-68</sup>

Issue of poverty among women are quite distinct and complicated. In the early decades of planning, problems of women were looked upon as problems of social welfare, rather than of development.<sup>69</sup> The drawback of welfare approach was that it did nothing to eliminate the social discrimination against and subordination of women. In almost all plans for poverty alleviation and social change, disadvantaged women became a ‘target’ in development activities rather than a group to be co-opted as active participants. The empowerment approach is the most recent and is aimed at empowering women through greater self-reliance and internal strength.<sup>70</sup> It seeks to meet strategic gender needs indirectly through bottom up mobilization around practical gender needs.

Access to financial services translates into better nutrition and improved health outcomes. Some microfinance schemes have been shown to improve access to health services and to result in health improvements. Yet, evidence on its possible impact on health status and health care access is still scattered,<sup>61-63,67,71-76</sup> national level impact assessment, in particular, is scanty with Bangladesh being the lone example. The Human Development Report 2005 attributes Bangladesh’s relative success in human development to microfinance. It improved access to health and education with expanded opportunities for empowerment and choice.<sup>63</sup>

In Bangladesh and in other countries, specific influence of microfinance is found in the contraceptive use, pre- and post-natal care, delivery, health promotion and nutrition practices.<sup>63,68,77-79</sup> Micro-credit clients in Bangladesh, for example, are 1.8 times more likely to use contraceptives than others and are likely to be less sick.<sup>63</sup> Similarly, in Ethiopia, Development AID for You (DAY), a savings and credit groups programme, allowed mothers access to ante- and post-natal health services, and infants to access regular immunization.<sup>79</sup> The programme also sensitized the community on nutrition and breast feeding, harmful traditional practices, family planning, sexually transmitted diseases (STDs) including HIV/AIDS, personal hygiene and environmental sanitation. Micro-banking is also found to enhance access to health care by reducing health care exclusion rates.<sup>80</sup> Specialized credit products are now being developed to closely match the economic cycles of clients and with a greater focus on health.<sup>81</sup>

### 3.2 Self-help approach in health

Self-Help Group (SHG), and women’s SHG in particular, represents a form of intervention that is a radical departure from most current programmes. They meet regularly in their villages to conduct business with bank representatives, and support each other’s efforts at economic self-advancement. It is seen as an effective strategy for poverty alleviation, human development and social empowerment driven by beneficiaries who, in other projects, often find themselves receiving goods or services in a manner that is opaque and impersonal.<sup>56</sup> A diverse range of women’s organizations including SHGs have developed in this context, conveying a multitude of issues and purposes.

The group-based idea was first explored in Bangladesh in 1976 when the *Grameen Bank* project was established. The strategy was to make up for a lack of ‘borrower collateral’ to secure loans by creating

‘social collateral’ through peer pressure support. It not only enables the poor to accumulate capital by way of small savings but also helps them to get access to formal credit facilities. These groups by way of joint liability not only improves group members accessibility to credit, but also creates mechanisms like peer monitoring leading to better loan recoveries. In the international health arena today, SHGs are being prescribed to alleviate the effects of a utilitarian approach to priority setting in the health sector of low-income countries that resulted in “rationing by exclusion”.<sup>82</sup> It is being now proposed that self-help should play a larger role and contribute towards improving population health outcomes. However, recently, many microfinance institutions have also grown quite rapidly by using individual liability, with evidence showing equal effectiveness in individual versus group liability schemes.<sup>83</sup>

Microfinance was initially developed to help the poor and other disadvantaged groups, particularly women, to escape from poverty and take greater control of their lives. Micro-credit for income-generating activities can increase household incomes, improving health indirectly through increased income and nutrition, and improving health directly by making health services more accessible. On the other hand, micro-credit for health expenses can facilitate access to needed care or help people cope with being unable to work because of illness.<sup>65-68</sup> Participation in micro-credit schemes ensures reasonable access to health care without falling into the debt trap that is often catastrophic in both financial and medical terms. It serves as a quick remedy for urgent financial requirements to meet unexpected health care expenditures. It can extend benefits to previously excluded groups or contingencies on a voluntary basis and can cover the target population without any income test or conditions. Besides, it has the potential to expand health care choice in the short run and reduce health care expenditure in the long run by contributing towards disease prevention and early case detection, thus reducing the disease burden and complexity. It is also likely to positively influence the efficiency of health insurance programmes since it aids early case detection by financing outpatient care ultimately reducing the use of inpatient care, where insurance claims are high. However, little evidence exists about the determining factors that affect poor individuals’ insurance decisions.<sup>84</sup>

### **3.3 Medical savings account as a health care financing option**

After many years of micro-credit, it was realized in the 1990s that the poor need a variety of financial services, not just credit. Accordingly, micro-saving and micro-insurance were developed and are also often discussed under the umbrella of ‘microfinance’.<sup>63</sup> Micro-saving allows people to store small amounts of money for future use, without minimum balance requirements and often in conjunction with credit facilities. Saving by the poor often comes in such small increments that conventional banks are not prepared to services to them, either because the transaction costs are deemed unprofitable or because of other more lucrative investment opportunities. With the advent of micro-saving, many poor clients are experiencing the benefits of wealthier savers - a safe place to deposit funds; easy access to those funds when they are needed, and interest on those funds. Key characteristics of micro-banking are described in Box-2.

**Box-2**  
**Key Characteristics of micro-banking**

**B**inds community where it promotes group lending

**A**tracts the rural and urban poor

**N**otably female clients

**K**eeps small transactions and minimum balance

**I**ncludes collateral-free loans

**N**o complex administrative processes

**G**rants short loan and repayment cycles (4-6 months)

Micro-banking services are now provided by six large networks of development banks (serving about 46.8% of poor clients), 61 big institutions<sup>h</sup> (39.7% clients) and numerous<sup>i</sup> small institutions (13.6% clients) in 47 countries.<sup>61</sup> Some of them are state-sponsored with significant involvement of subsidies while others are mostly not-for-profit institutions. Some micro-banking institutions, primarily engaged in other businesses, extend micro-banking as a means to generate community goodwill so as to enjoy competitive edge through the banking-health linkage. Altogether, micro-banking resources constitute about 2.5% of total banking resources.<sup>64</sup> An example of micro-banking is given in Box-3. Medical saving, like any other saving, can help to smooth consumption (i.e., regularize and make it consistent) and pool risks across time (though not across households), acting as a form of self-insurance against income shocks. It also provides an opportunity for the health sector to move towards prepayment mechanisms rather like the medical savings schemes first developed in Singapore. It is possible that individual savings schemes could be combined with health insurance so that risk pools could be eventually expanded to facilitate spreading risks across population groups.

Given its strength to reach out to disadvantaged households, micro-savings, if it can be made into medical savings, can serve as an institutional financing mechanism to convert unorganised household out-of-pocket spending into pre- or post-payment schemes. Its other potential advantage, when it relies on group-pressure as collateral, is that it can stimulate intra-community bonding by bringing the community members together on a regular basis and inter-community bridging by networking micro-banking institutions across different Geographic areas. When medical savings clients are women, they meet on a regular basis to deposit savings; such meetings can be used as an opportunity to impart health education and to promote greater autonomy in making decisions concerning their own health care.

<sup>h</sup> Each serving more than 100,000 clients

<sup>i</sup> About 3,250 of them

**Box-3****An example of micro-banking<sup>63</sup>**

Credito con Educacion Rural (CRECER), a group-based lender in Bolivia, uses village banking comprising groups of 15-20 members to offer integrated financial and education services to poor women in rural and marginal urban areas for bettering their health, nutrition and economic status. Loans, repaid in 16-24 weeks, are given to the group, which then divides the funds among its members. Village banks meet every 1-2 weeks during which members repay loans and make deposits. Members are also trained on a variety of health topics (women's health, breastfeeding, integrated management of childhood illnesses, infant and child feeding, etc.). In some places, CRECER also established contacts with rural health care clinics to offer clinical health services.

As of September 2005, CRECER had 4,306 village banks serving 68,748 members with savings worth US\$ 3.24 million and outstanding loans worth US\$ 12.46 million (mean loan size US\$ 150 per borrower). About 23% of the clients were reportedly in the poorest population group, 50% were moderately poor, 21% were at the threshold and 6% were non-poor.

Micro-banking in general, and micro-savings in particular, is still evolving and the actual number of poor people linked with formal banking institutions through micro-banking is not yet known. Estimates on the number of savings and credit accounts with 'alternative financing institutions' in 2004 indicated the existence of about 650 million micro accounts serving about 500 million clients worldwide. The vast proportion (84%) were found in the Asian and Pacific regions.<sup>52</sup> Demand side estimates indicate that micro-banking has so far reached about 2-13% of target (i.e., the poor) population in different settings.<sup>85</sup> The most recent estimate of the median size of a micro-loan per borrower ranges from US\$ 99 (PPP int.\$ 453) in the WHO South-East Asian Region to US\$ 1,254 (int.\$ 3,120) in the European Region. These sums are considerably higher when the purchasing power of the loans is taken into account - refer Box-4. Nominal interest rates charged on the loans vary between 18% and 61% indicating varying efficiency of micro-banking institutions. Although the annual rate of interest is significantly higher than the formal sector lending rate, it still falls far short of the interest rate of 36-5,000% reportedly charged in the informal banking sector.<sup>86-88</sup>

No estimate is available of the micro-banking resources available for health. However, there are indications that poor households in low-income countries are willing to earmark up to 5% of their annual income for micro-banking for purposes including, but not exclusive to, health. In Karnataka, for instance, rural women saved (multipurpose including health) US\$ 4.38 per capita per month in 2003-04.<sup>56</sup> Although this is small in absolute terms, micro-banking could be important in relative terms. Medical savings suiting urban/formal sector population exists in China, Singapore, the United States, and South Africa.<sup>89-93</sup>

**Box-4**  
**Median size of a micro-loan across WHO regions**

Source: Gonzalez, 2008

WHO Region	Micro-loan size per borrower	
	US\$	PPP int.\$
<i>African Region</i>	203	779
<i>American Region</i>	636	1,428
<i>Eastern Mediterranean Region</i>	257	674
<i>European Region</i>	1,254	3,120
<i>South-East Asian Region</i>	99	453
<i>Western Pacific Region</i>	282	1,073

Women play a very insignificant role in banking and difficulties of banking affect women most severely of all among the rural poor. If very few assets are available as limited collateral for loans, even fewer are entrusted to women.<sup>94</sup> Between the services offered by moneylenders and those of conventional banks, the rural poor (especially women) are caught in a void. The inability of credit institutions to cover a sizeable segment of the rural poor, especially women, is generally attributed to the high cost of administering large number of small loans on the perceived lending risks in the absence of any collateral. In this context, medical savings account (MSA) could be a possible option not only to solve women's health care financing woes but also to empower women to gain more banking access.

MSA can be defined as a single or family savings account from which routine medical expenses are paid and to which contributions are made by a combination of individuals, employers, and government. This approach is intended to streamline unorganized private health care resources and to reduce unnecessary demand for health services by making individuals financially responsible for the pattern of consumption. Many health benefit specialists seem to recommend MSA as a possible option to finance health care.<sup>95</sup> However, knowledge on MSA is still limited. The most established public MSA program is found in Singapore, a city-state with a population of 3.3 million. In 1984 the government established *Medisave*, a compulsory program to which an amount equivalent to 6-8 per cent of an employee's pre-tax wages is contributed by the employee and the employer in equal proportions. The plan covers hospital and some expensive out-patient services. In 1994, China initiated a pilot project in two cities with a combined population of five million, representing about 1.4% of China's urban inhabitants.

The role of microfinance, however, differs widely according to the characteristics of communities, cultural attitudes, and political systems. Microfinance could extend its activities to health sector in developing countries on the following grounds.<sup>96</sup>

- In most developing countries, households already spend substantial amounts of money in purchasing health care from the private sector, both modern and traditional. Redirection of this expenditure towards services which have a greater impact on health would not be placing an additional financial burden on individuals.
- It can attract, for use in the health sector, resources otherwise not exploited, i.e. labour, land and contributions in kind.
- It is a tangible demonstration of community participation, which is likely to increase health care utilization.
- It gives the community the right to ensure that services are acceptable and respond to the priorities as judged by the community.
- It can complement formal social security schemes which cover the regularly employed by mobilizing contributions from the self-employed, particularly in rural communities.

Of course, there are opposite views as well suggesting a cautious approach towards microfinance.

- Microfinance or any form of community-based financing does little to promote equity and can place too great a burden on the poor and the sick.
- Resources can rarely be raised on a sustained basis through voluntary labour, while many of the resources generated are not easily used to meet full range of health needs.
- It tends to favour the creation of those kinds of health facilities for which there is a high local demand rather than meeting professionally perceived needs.
- A high degree of external support is needed to mobilize and sustain community efforts.

Lack of stability of revenue, and of volunteer activity, tends to limit its usefulness on a long-term basis, though many of the resources used such as materials in kind and labour may not be capable of being readily put to alternative uses. The limited cash resources generated also do not help with the severe difficulties in financing medicines and diagnostics, which may require substantial amount of resources.

However, many desirable innovations have been introduced in microfinance projects in the developing world and these provide grounds for some optimism. The emphasis has already shifted from medical service and a medical technology or even from the mobilization and generation of untapped community resources to enabling people to gain greater control over their own lives.<sup>96</sup> The extension of risk management techniques from other sectors to the health sector is now happening in much microfinance and development organizations in low-income countries.<sup>75</sup> This is especially true in the case of micro insurance. Reinsurance has been considered as a means of tackling some of the inherent problems of the smaller size of the risk pool associated with these schemes. The most recent National Rural Health Mission in India proposed to enhance community participation by giving functional responsibilities and



powers to the *punchayat raj* (local self-government) institutions, apart from creating a cadre of voluntary accredited social health activists, and a drug and contraceptive depot at the village.<sup>44</sup>

### 3.4 An account of microfinance scenario in India

Key objectives of micro finance in India are provision of financial services to improve living standards and improvement in incomes through prudent use of the resources.<sup>97</sup> The objectives are reflected in the dual approaches followed by microfinance practitioners - minimalist and microfinance plus. The minimalist approach contends that microfinance industry should focus on credit delivery and other financial products to poor clients with little or no access to formal banking institutions. The approach propagates that the poor need to be “enabled” first to make prudent use of the credit made available in order for credit to achieve a positive impact on their income levels. Another division within the industry is about cost-effectiveness of microfinance services. One contention is that cost-effectiveness means financial sustainability of microfinance institutions. Opponents of this contend that financial sustainability may be desirable but not a goal in and of itself; the goal is poverty alleviation.<sup>98</sup>

The NGOs are instrumental in providing informal structures of the poor to help them save and promote self-reliance in financing their needs through the concept of SHGs. Most SHG-based programmes are implemented through partnerships between the government, non-government organizations (NGOs), and donor agencies. Many SHGs also have the potential to transform themselves into vibrant civil society organizations.<sup>99</sup> The first official interest in informal group lending in India took shape during 1986-87 on the initiative of the National Bank for Agriculture and Rural Development. A study by Khandkar revealed that the monthly income of the beneficiaries had increased substantially following the effective implementation of the microfinance programme.<sup>100</sup> A large number of groups had become ‘mini banks’ reducing the dependence on moneylenders. It had also resulted in improving their standards of hygiene and nutrition. The major findings were that the urge for literacy especially for the girl child and the adoption of family planning measures had increased. The process of group dynamics has strengthened the networking, homogeneity and self esteem of women.

A major initiative, which redefined the role of government vis-à-vis microfinance is *Kudumbashree* in Kerala. Women’s empowerment got the central place in the conceptualization of *Kudumbashree*, although it was operationalized largely through a market-oriented strategy such as micro-enterprises, thrift and credit societies, informal banks etc.<sup>101</sup> Its health component, however, was limited to creating awareness and facilitating access of members to health services. A Community Health volunteer, selected from among its members, performs convergence of various programs under the Health and Social Welfare Department and helps the members, especially women, children and the aged, to access health services.

Micro health insurance (frequently referred to as community-based health insurance or CBHI) is the most prevalent form of microfinance in health and is still growing. CBHI designs insurance products specifically suiting the needs and budgets of the poor communities. Hence, by design, the organization, management, delivery, client range, and funding of CBHI programmes vary enormously. In fact, there are a number of CBHI models that are being piloted in different parts of the world with India emerging as a ‘CBHI laboratory’. Their experience offers valuable lessons to others who would like to design,

implement, and improve upon their own programmes. It is estimated that micro health insurance benefited 7.5 million people in India, 2.5 million in Bangladesh, 1.5 million in west Africa, 1.2 million in the Philippines, and 40,000 people in Nepal in 2003.

SEWA extended microfinance tools to social security and insurance.<sup>94,102</sup> The main motivation for initiating a health insurance scheme for women was that women tend to place a low priority on their own health care needs. Women in India, and especially those in rural areas, given their general living conditions and the double burden on their shoulders, have never publicly voiced their concern over their reproductive, sexual and gynaecological health needs.<sup>103</sup> While the problem starts at the family level itself wherein women's health needs are less important, the actual neglect is due to inadequate allocations by the State for health care services. SEWA experience shows that self-help approach could prevent impoverishment through protection against catastrophic health expenditures of poor households. Another examples of self-help approach in health care are provided by The *Mahaliar* (women) Association for Literacy, Awareness and Rights (MALAR), an women's savings group mobilizing women belonging to the oppressed strata of the society.<sup>82</sup> Other examples are the *Jeevan Jyoti Insurance Scheme* in Assam, *Yeshasvini Scheme* in Karnataka, and community health insurance in Gujarat.<sup>104</sup>

Devadasan et al provided an overview of health insurance in India.<sup>105</sup> According to them, community health insurance is an important intermediate step in the evolution of an equitable health financing mechanism such as social health insurance found in Europe and Japan. They argued that community health insurance schemes in India offered valuable lessons for policy-makers. For instance, in recent years, CBHI has emerged as a possible means of (1) improving access to health care among the poor (2) protecting the poor from indebtedness and impoverishment resulting from medical expenditures.

## 4. CONCEPT AND METHODS

Household decision making processes are an important, but at times, could be inconsistent with the presuppositions of formal economic theory. For poorer households, seeking health care involves greater planning and patients, in this case, may be more pro-active in mobilizing resources before seeking care. Household assets such as the land and animals (chicken, goat, cow, etc.) provide safety nets to the poor households. However, landless households are deprived of any such assets acting as safety nets.

### 4.1 Concepts

This project essentially dealt with two key concepts - *medisave* and willingness to save. Medical savings account, or *medisave* in brief, refers to individual saving account restricted to health or medical care spending. The key aspect of *medisave* is pooling of resources over time. Pooling over time essentially means accumulation of resources when healthy and spending them when ill; in the long run, it is based on a person's observed saving and health spending behaviour during his/her life-cycle.

#### 4.1.1 Experiences with *medisave*

Countries like China, Singapore, South Africa, and USA have introduced some variant of *medisave*.<sup>106</sup> They, however, differ in terms of objectives, design, and target groups. Limited experience with *medisave* so far suggest that it cannot be employed as a major financing option for health. Its resource mobilization potential is minimal with the amount of funds accumulated and available are significantly higher for the advantaged than for the poor and disadvantaged; women's ability to accumulate funds is particularly limited. *Medisave* does not pool the financial risk across individuals; but, it pools resources over time. Its ability to contain costs is also found to be limited.

Given the experience, *medisave* could be employed as a supplementary health financing option along with tax financing and health insurance adequately complemented by some kind of safety net and government stewardship so as to safeguard the poor and disadvantaged. More specifically, it could be used as a prepayment option to streamline household out-of-pocket spending on outpatient care by pooling resources over time. It could work particularly well when there is not much demand on its funds during the saving cycle.

#### 4.1.2 Applicability of *medisave* to rural areas

Knowledge on medical savings account, and its relevance to rural health care context in particular, is still limited. A vast majority of rural dwellers are engaged in informal sector works and are predominantly poor. They are, however, not a homogenous entity and so, a differential health financing tool need to be developed for the poor because low-income households tend to display varied financing ability.<sup>107-108</sup> *Medisave* could be an option for those poor who already incur out-of-pocket spending on health particularly when they appear to be better aware of saving than insurance benefits in Karnataka.<sup>108</sup> However, saving by the poor often comes in such small increments that conventional banks are not prepared to offer services to them, either because the transaction costs are deemed unprofitable or because of other more lucrative investment opportunities. Women, in particular, played a very insignificant role in banking.<sup>94</sup>

The situation has changed following the development of microfinance instruments suiting low-income households. The literature provides some evidence of its positive contribution to health care financing through improved access to drugs, primary care, and even to more advanced hospital care.<sup>72,75,80</sup> Microfinance has demonstrated that the poor people are bankable and insurable and therefore, have widened the scope for new alternatives.<sup>61,64</sup> With this, it is now realized that even the low-income households can make periodic contributions adding up to significant contributions for health care. Women, in particular, could be a major beneficiary group because they are more likely to use the saved funds for health care than men.<sup>109</sup>

#### 4.1.3 Willingness to save for health care

Willingness to pay (WTP) concerning any aspect of health care is a tricky and complex phenomenon, as indicated by a diverse range of WTP methods.<sup>110-113</sup> Some even argue that health care is priceless, as its benefits are infinite, and therefore, it would be difficult to set a value for WTP concerning health care.<sup>113</sup> Yet, WTP has been frequently used in health to elicit community perspective on certain new measures such as health insurance and community-based financing. For instance, values derived from community members may be more relevant than values derived from patients.<sup>114</sup> Moreover, a WTP survey may provide a way to ensure greater synergy between theory and methods.<sup>109</sup> It can also be argued that consumers know best how to allocate their resources and their willingness to pay can be assumed to be closer to their ability to pay.

Determinants of WTP vary across health care and socio-economic contexts. For instance, household decision making processes are an important, but at times, could be inconsistent with the presuppositions of formal economic theory.<sup>109</sup> Similarly, personal income influences WTP and actual health care expenditure in some contexts.<sup>109,115</sup> User fee experience of many countries suggests that a majority of the poor are not willing and able to pay for health care, which is amply indicated by the decline in health care utilization after the introduction of user fee.<sup>116-118</sup> At the same time, user fee contributions of some poor people indicate that WTP may not depend on income.<sup>19,119</sup> However, for poorer households, seeking health care involves greater planning and patients, in this case, may be more pro-active in mobilizing resources before seeking care. Household assets such as the land and animals (chicken, goat, cow, etc.) provide safety nets to the poor households. However, landless households are deprived of any such assets acting as safety nets.

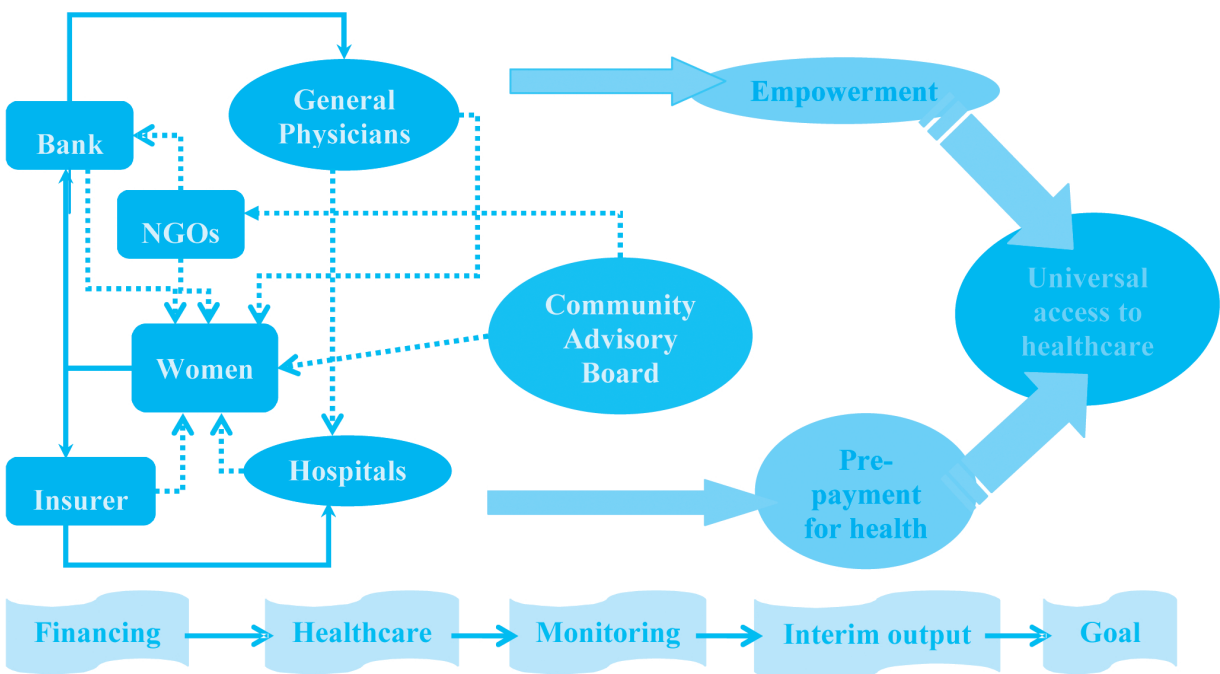
#### 4.2 The conceptual approach behind the *medisave* experiment

Although *medisave* could be applicable to the poor, poor people are not a homogenous entity and so, there is a need for a differential health financing tool for the poor because low-income households display varied financing ability.<sup>107-108,120</sup> It was also found that rural people, at least in the Karnataka context, are relatively better aware of saving and life insurance than health insurance.<sup>108</sup> However, saving by the poor often comes in such small increments that conventional banks are not prepared to offer services to them, either because the transaction costs are deemed unprofitable or because of other more lucrative investment opportunities.

The broad aim of the *medisave* experiment was to extend the already prevalent (informal) saving habit

to formal banking operations and to fine-tune the banking process to finance health care. The conceptual framework was devised in such a way that men did not use women as their fronts and women did not use the funds for purposes other than health care. The conceptual approach behind the experiment is explained in Figure-2; bold arrows represent money flow while dotted arrows indicate service flow. The long-term goal is to attain universal access to healthcare through empowerment and enhanced financial access. The model advocates a combination of banking (for outpatient care) and insurance (for inpatient care) to streamline and minimize the household out-of-pocket spending besides checking insurance claims on hospitalization. It is possible through a reduced cost of finance/coping (due to streamlining) and of insurance once the rates of hospitalization (due to early diagnosis/treatment) and of claim per hospitalization (due to reduced severity) gradually decline.

**Figure-2**  
*Medisave - The conceptual model*



#### 4.2.1 Medisave as a pre-payment tool

The basic objective of the experiment was to facilitate provision of essential health care in a sustainable manner to the un-banked disadvantaged populations, particularly poor women in remote rural areas. It specifically targeted the outpatient care with the conceptual understanding that

*‘early diagnosis and treatment of minor ailments and timely and adequate ante/post natal care would essentially minimize the need for hospitalization and catastrophic expenditure. Similarly, improved financial security to seek outpatient care would phase out the unorganised health financing; eliminate impoverishment because of health care; and minimize unmet health care needs’.*

It should, however, be noted here that it cannot be considered as a substitute for health insurance although it may gradually minimize insurance claims (for the insured) by arresting the disease progression early.

#### 4.2.2 *Medisave* as women's empowerment tool

The experiment also tried to enhance women's empowerment in the context of women lacking autonomy to health care and financial autonomy. The hypothesis was that *medisave* empowered rural women (by enhancing their financial security); expanded their health care access (by making financial resources available at the time of need); and minimised, or possibly eliminated, the financial catastrophe and impoverishment (by preventing distress loans and selling of assets).

#### 4.2.3 The partnership approach

The *medisave* model required a partnership between nine major actors. **First**, the experiment was initiated and coordinated by an academic institution. **Second**, a government national bank was involved in the initial design, and creation and maintenance of *medisave* accounts; being a government bank widely prevalent, it also provided credibility to the experiment. **Third**, three local NGOs (one in each district) coordinated the district-level operations such as local coordination, management, community rapport building, data collection, enrolment, and house visits.

**Fourth**, a locally constituted Community Advisory Board monitored financing and health care processes; its members were the local NGO (ex-officio), a community leader, the bank manager, and a popular physician (other than the one designated as outpatient care provider). Formation of this board in each district was a significant step to ensure the smooth functioning of the experiment. The board provided the essential link between the women and the project team besides helping to oversee the functioning of the bank, providers and insurers. The constitution of the board required that at least one member was a woman. Outpatient and inpatient care providers and insurers were invited to the meetings as special invitees mainly to clear any doubts. When the board met for the first time, it was briefed by the partner NGOs about the project, its objectives and design. The meeting was periodically convened to assess the progress of the project and to discuss issues that emerged from time to time. Also, they were invited whenever the project team met the women.

**Fifth**, a government national insurer provided the health insurance service to the enrolled women; the insurance included services such as delivery, diagnostics, and hospitalization. **Sixth** groups of actors, of course, were the women, who were the subject of the experiment; their cooperation was extremely important for the experiment to succeed. **Seventh**, seven general physicians (including a government physician), as preferred by the women during the survey, provided the outpatient care. **Eighth**, three hospitals provided cashless inpatient care including delivery; only those institutions identified by the women and capable of providing delivery care were shortlisted for this purpose. **Ninth**, two gender experts offered consultation on gender and women's health care issues.

There were also others such as a local NGO, which evaluated the project outcome and two government health system development teams which explained the benefits of the project to the local community.

### 4.3 The population-based survey

The major task of the experiment was to bring socially and economically challenged rural women into the formal banking system and to inculcate a habit of savings exclusively for outpatient care expenses, which the beneficiaries never ever did in the past. The task included a series of actions viz., a population-based survey, women's enrolment with a bank, general physician and insurer, health care seeking in the event of illness, monitoring and evaluation of the health care seeking and financing processes. The survey was carried out to estimate rural women's willingness to participate and pay for *medisave*. More importantly, it provided essential data for women's enrolment, choice of provider and follow up.

Three districts, where development banking was a priority, were chosen for the experiment; their combined population was 4.8 million or 9% of the state population. As shown in Table-4, the districts had LOWER state income, life expectancy, health and human development indices, and HIGHER infant mortality rate. In the chosen districts, 30.3% of deliveries did not receive skilled assistance in 2005-06; 9.4% of pregnant women did not receive antenatal care; and 61% of them received only less-than-optimal antenatal care.<sup>12,54,56-57</sup>

**Table-4**  
**Human development profile of the chosen districts (2001-02)<sup>56</sup>**

Indicator	District			State average	Top district
	Dharwad	Haveri	Mandhya		
Population (share in state total, %)	3.0	2.6	3.4	-	12.3
Rural population (%) 45.0	79.2	84.0	66.0	11.9	
Share in state income (%)	2.9	1.9	2.6		22.5
Human development index	0.64	0.60	0.61	0.65	0.75
Health	0.62	0.62	0.63	0.68	0.75
Income	0.55	0.49	0.51	0.56	0.67
Education	0.76	0.70	0.68	0.71	0.89
Female life expectancy at birth (years)	62.4	63.2	63.9	67.0	69.3
IMR (per 1,000 live births)	69	66	62	55	44
Female literacy - rural (%)	47.7	54.5	47.7	48.0	73.0
Female work participation rate (%)	28.6	33.7	33.9	32.0	41.7

Survey areas within the chosen districts were identified on the basis of their backwardness measured in terms of banking intensity (number of bank accounts per 1,000 people). The 'area' here refers to the serving area (nine villages and about 11,000 population) of each branch of a government national bank, which is also the lead bank in the chosen districts. Details of the target populations and their banking

transactions were collected from each branch and all the areas falling in the three districts were ranked according to their banking intensity. The area with the lowest banking intensity in each district was selected for the survey; in other words, they were backward in a banking sense. All the households and women aged 18 years or above (eligible to operate a bank account) were listed and included in the survey.

### 4.3.1 The survey instrument

A two-part household-cum-individual interview schedule (given in Annex-1) was used in the survey after peer-review and pre-testing; the first part sought household information whereas the second part was dedicated to women members aged 18 years or above. The household section of the schedule recorded socioeconomic characteristics of the members while the individual section sought details on women's individual characteristics, health status, health care needs, intra-household resource allocation to health, preferred health care providers, and willingness to participate and pay for *medisave*.

The instrument was first developed in English and got translated into the local language - *Kannada*. It was sent to two gender experts for expert opinion before it was translated. The translation was duly verified by a health economist who knew the local language and had prior research experience in the chosen areas. The survey instrument was pre-tested in the field twice before and after the translation.

For easy identification of women for follow up, the interview schedule was numbered using a 7-digit number. The household questionnaire had a 6-digit number - the first digit (a letter) indicated the district, second digit indicated the village code, and the last four digits indicated the household number.

*For example, 120<sup>th</sup> household located in the 4<sup>th</sup> village of the Dharwad district was given the number as D40120.*

Similarly, each woman in the household received a 7-digit number. First six digits indicated the household number to be followed by the single digit individual number.

*For example, second woman living in the 35<sup>th</sup> household located in the 7<sup>th</sup> village of Haveri district was given the number as H700352.*

Same individual numbers were used for enrolling the women into the *Medisave* programme.

### 4.3.2 Staff training

Staff training was a crucial component of the project. The training was considered crucial because the project was conducted in three different settings with somewhat dissimilar socio-economic contexts. Moreover, the project in each district was managed by three different NGOs. More importantly, given the size of the population to be covered in a short span of time, the survey required more staff to conduct the interviews. So, it is all the more important to make it uniform and comparable.

The training started with the training of three experts (one from each NGO), who acted as trainers for the staff who carried out the survey. The initial training was offered by the Principal Investigator. Project



objectives were clearly stated to them besides sensitizing them about the community sensitivities and data accuracy requirements. They were also taught about trouble shooting mechanisms, as they would be dealing with varied groups of communities. They were instructed to leave the contact details with the community members when asked and provide them in the survey instrument in any case. Data verification methods including triangulation were also covered by the training.

The trainers, under the supervision of the Principal Investigator, then trained the interviewers, recruited locally. Care was taken not to recruit the interviewer from the same village in order to avoid any bias. Each item in the survey instrument and its relevance was clearly explained to them. They were also informed about techniques to cross-verify details provided by the households. Indicators like income, nutrition intake, health status and health care seeking were given special attention. The entire training process, except the training of NGO experts (conducted in English), was carried out using the local language - *Kannada*. Since the staff members were involved in the survey process from the beginning, there were more than two occasions in the initial stages to correct them, as they were asked to conduct mock interviews.

### 4.3.3 Data collection

Once the instrument was developed, peer-reviewed and pre-tested, the survey was carried out by three (one in each district) partner NGOs (Non-government organizations) working for women's progress in the chosen population. Already trained staff members (about 20 of them) from the NGOs administered the interview schedule. The trained NGO experts served as group leaders for the purpose of the survey and led them in the field.

Data collection started with meeting of community leaders and women in groups. They were explained about the project features, particularly about the involvement of money at the latter stage. In order to make it convenient to them, the meetings were scheduled in the evenings and mostly in temples. All the questions and doubts, including the status of the Principal investigator and the local NGOs, were answered before starting the survey.

The next step was the enumeration of households and numbering them. In order to identify them easily, all houses in the chosen 27 villages were serially numbered; numbers were marked in the entrance of each house. The third step was to list the household members and fill the household part of the survey. The household part was answered by a senior member of the household, irrespective of the sex or economic status. The household part recorded details of all household members and common characteristics of the household. It also indicated the number of women aged 18 years or above. The second part of the survey was filled for those women aged 18 years or above. Three attempts were to find each woman missing during the first time. Similarly, missing households were tracked. Attempts were also made to track members who temporarily shifted their residence on account of delivery needs or for festivals if the temporary residences were within any of the 27 survey villages (in essence, 9 villages in each district).

## 4.4 The *medisave* process

The experiment included a select group of 600 women (200 from each district) from among those who

expressed their willingness to participate. It used medical savings account or *medisave* as a micro-saving instrument to cover the health financing functions of resource mobilization, risk and resource pooling, and purchasing of care. Given that saving by the poor is likely to come in small increments, medical saving accounts specifically opened for the poor women allowed them to deposit money in small amounts for future use, without minimum balance requirements and use them for health care purpose as and when the need arises.

#### 4.4.1 Choice of women

The women were drawn from 27 villages identified as ‘backward’ on the basis of their backwardness measured in terms of banking intensity (number of bank accounts per 1,000 people). The enrolment of the women was based on the survey results and women’s willingness to participate. Women were presented the conceptual model and were specifically asked whether they would be willing to participate. They were also presented with two scenarios - one without any matching grant and the second with a matching grant. Only women who expressed their willingness to participate were considered for enrolment. For the purpose of making the spread of enrolees more representative of the population, women were grouped into 48 socio-economic sub-groups based on their social class, level of poverty, literacy, and health care decision-making. There were four social classes - forward (the highest social class), backward, most backward and scheduled caste/scheduled tribe (the lowest social class); each social class was represented by 12 groups. Table-5 illustrates the inclusion criteria using the backward class women as an example; as it can be seen, there are 12 groups concerning the backward class women. Number of women in each group (cell) was decided on the basis of their representation in the population.

Within each sub-group, the choice of women enrolee was based on additional criteria such as employment status, income, ability to spend money, access to television, and nutrition intake so that the chosen women truly represented the community to which they belonged. Before seeking their consent, women (who expressed their willingness to participate), their families and community members were met in groups to explain the purpose and the implementation process. Six handed of those women who expressed their willingness and who fulfilled the inclusion criteria were met individually for informed consent to enrol. A village-wise list of 600 women and their matched substitutes was prepared by the Principal Investigator and provided to the NGOs for enrolment. This was done to eliminate any enrolment bias, as the NGOs belonged to the same context. In cases of women changing their mind at the time of enrolment, their close substitutes were enrolled. They matched the first listed women in all respects mentioned in the inclusion criteria. In some cases, it required a third list too, as both the first and the second choices changed their mind and decided not to enrol.

#### 4.4.2 The enrolment process

Once women were identified based on their socio-economic status, they were individually contacted for enrolment. A matched substitute was kept ready for each potential enrolee in case the first identified woman changed her mind. In some cases, we had to go for a second substitute because the first two either changed their mind or were not allowed to join. The enrolment required opening of a bank account in each woman’s name with the local branch of the government national bank. Besides, informed consent to enrol, a separate authorization letter was obtained from each woman authorizing the local

NGO to recommend deduction of health care expenses of the woman from her account on a monthly basis. Each month, the NGOs collected the bills from the physicians and recommended a deduction from the respective women's accounts. The sum accrued was passed to the respective physician.

**Table-5**  
**Matrix explaining women's inclusion criteria - the case of backward class women**

Social class	Poverty status	Literacy	Decision to seek health care
<b>4 social classes</b>	<b>2 per social class</b>	<b>2 per poverty group</b>	<b>3 per literacy group</b>
<b>4 × 1 = 4 groups</b>	<b>4 × 2 = 8 groups</b>	<b>8 × 2 = 16 groups</b>	<b>16 × 3 = 48 groups in total</b>
Backward	Above Poverty Line	Literate	Self
			Joint
			Others
		Illiterate	Self
			Joint
			Others
	Below Poverty Line	Literate	Self
			Joint
			Others
		Illiterate	Self
			Joint
			Others

The enrolees were regularly met individually and in groups to explain the experiment features, banking and health care processes, and to share their experiences. These unbanked or bank-illiterate women were also taught to read various entries, particularly the balance, in their passbooks. Enrolees enthusiastically participated in such meetings and learnt about various features and processes. In fact, this empowerment was one of the major long term outcomes of the experiment. The meetings were usually organized in temples. Spouses of these women too came along with them in the beginning, but they stopped coming once confidence was established.

Enrolees, on their part, gathered together in groups every month to collect and consolidate the deposits of the enrolees and took turns to deposit the sums in the respective bank accounts so as to reduce the transport cost. Since the women were taught to read the passbook, they checked the entries in their respective passbooks once the care taker woman returned.

Besides the informed consent at the time of enrolment, a separate authorization letter was obtained from each woman authorizing the local NGO to recommend deduction of health care expenses of the

woman from her account on a monthly basis. Each month, the NGOs collected the bills from the physicians and recommended a deduction from the respective women's accounts. The sum accrued was passed to the respective physician.

#### 4.4.3 Financial resources

Each of 600 women, without a bank account, opened an individual savings account in her name. In order to freeze the account for other purposes than health and as an incentive to participate, each deposit was matched by an equal sum not exceeding US\$ 2 per month. Hence, financing sources for outpatient care were women's own savings and the matching incentives provided from the research grant. A separate arrangement was made with an insurance company to provide cashless group insurance (benefit up to US\$ 250) to the enrolled woman, her husband and two children. Women were free to make deposits as and when they had spare money. There was no restriction on the number and amount of deposits. In order to minimize the travel costs (in some cases, banks were located in the neighbouring village), women made a group and took turns to collect and deposit money in their respective accounts. Since they never had bank accounts before, they were taught to read various columns of the passbook. They were specifically told to monitor their own deposits, the matched grant, interest and the withdrawals for health care.

A separate arrangement was made with an insurance company to provide cashless non-contributory group insurance (benefit up to US\$ 250 per year) to each enrolled woman, her husband and two children. The insurance included benefits such as delivery care (normal and C-section), hospitalization, diagnostics related to hospitalization, surgery, etc. Antenatal care, treatment for minor ailments, diagnostics not connected with hospitalization, medicines, etc. were covered by the *medisave* balance.

#### 4.4.4 Tracking the ability to save

In order to estimate women's ability to save, bank records in three local branches of the government national bank were tracked periodically. Bank records separately provided details of the women's deposits, the matching grant deposited into their accounts, and bank interest. They also detailed the withdrawals, which were only for health care purpose; the withdrawals thus indicated the money used by the women for health care purpose. While no pressure was applied on the women to save, they were given the message 'save before illness strikes' each time the Principal Investigator, other investigators or the NGOs met them either individually or in groups.

#### 4.4.5 Health care provision

The main aim of the project was to provide good quality care to the enrolled women. Therefore, some efforts were made to identify the qualified and reputed physicians and hospitals. During the survey, women were asked to rank the general physicians and hospitals of their choice in their or neighbouring locality. Preferred general physicians, as voted by women during the survey, were met individually to ascertain their qualifications and willingness. The top-ranked physician was first met and the second physician was contacted only when the first physician was not qualified or refused to participate. In one district, all the three physicians ranked by the women were less-than-fully qualified and therefore, a separate list was prepared with the help of the local community leaders, who were met specifically for

this purpose of providing another list of qualified physicians (in their opinion). Finally, all the physicians designated as ‘outpatient care providers’ were fully qualified physicians with reputation.

Seven (six non-government and one government) outpatient care providers were chosen from the same village to service about 85 women each. In some areas, it was difficult to find a qualified physician and so, the one from a neighbouring village was chosen. For inpatient care, hospitals listed by the women were verified for two things - whether they are recognized for insurance purpose and whether they had facilities and gynaecologists for delivery purpose since antenatal care, delivery care and care for reproductive health problems are key aspects of women’s health care. Three hospitals (one in each district) qualified as insurance providers were chosen.

Each woman was required to use only her chosen provider when in need and each provider was given the list of women enrolled with him/her. A notebook carrying the woman’s name, age, address, photo, and the provider’s name was given to each woman. In the event of illness, the women approached their designated providers depending on whether it required outpatient or inpatient care. Women were not required to pay at the point of delivery of service (outpatient or inpatient care) so long as the bank balance (deposit, matching sum and interest) exceeded the treatment cost; providers were given an updated balance every month. A fee (50% of market price) of US\$ 0.25 was agreed to be deducted for each consultation. Designated physicians were kind enough to reduce their consultation fee by about two-third. Physicians wrote the treatment cost (with break-up) in the notebooks and it was reimbursed monthly. Inpatient care was provided cashless and the insurer reimbursed up to the benefit ceiling. Utilization of services was a continuous process and the pattern of utilization by the women was routinely noted down by the partner NGOs.

For reimbursement of the treatment cost to the physicians, each month partner NGOs supplied the physicians with the list of women enrolled with them along with their eligible amount as on date. This list was updated every month. Women seeking care were eligible for care up to the balance sum against their name at the time of care. The balance sum varied each month depending on the contribution made by the women, matching grant and the amount already utilized towards care. The women were required to pay (at the time of care) only the treatment cost exceeding the balance in their account. The claim was made with the partner NGOs, who in turn, requested the release of the sum from the bank from the women’s own accounts. Only NGOs, not the bank manager, were authorized to release the money from women’s accounts.

This experiment was planned for one year. At the end of one year, the women enrollees were allowed to withdraw the unused sum (with interest therein) for other purposes than health care.

#### **4.4.6 Monitoring and evaluation**

Five process of monitoring and evaluation were employed in this project. *First* process was the issuance of notebooks to the women, which were carried by the women whenever they visited the physicians. Physicians entered the illness, treatment and cost of care details in the notebook. It was possible to verify whether the illness, treatment and the cost matched through these notebooks.

The *second* process was the formation of the community advisory board. The locally constituted Community Advisory Board in each district regularly met and discussed about the progress, disputes and problems concerning the treatment and the banking processes. It tried to find immediate local solutions for problems and disputes. The *third* process was maintenance of ledgers of the women by local NGOs. This was mainly to document the health status, sickness, if any and the treatment seeking pattern. Each woman was visited periodically by the NGOs to record her well-being and treatment seeking. The ledgers captured the lack of treatment, treatment from outside the designated physicians and their reasons too.

The *fourth* process involved independent evaluations by government health system development teams at the district level. They visited the women and enquired about the progress. Their visits were also useful to provide clarity on certain aspects of the experiment. The *fifth* process was the impact evaluation by a local NGO not associated with the project. It particularly checked whether the experiment empowered women and enhanced their healthcare access.

In addition to all these, a resurvey of 1,800 women (600 enrollees and 1200 matched non-enrollees) was carried out to assess the impact after one year.

#### 4.5 Data analysis

We compared willingness and ability to save and their relationship with age, social class, literacy, level of autonomy, poverty and employment. We used two steps to assess the influence of these factors on the aggregate annual savings of women. We first applied Pearson Chi-square test to assess the association of the independent variables followed by a multinomial logistic regression to estimate the Odds Ratio among the associated variables on the aggregate annual savings. SPSS version 15.0 for windows was used to conduct statistical tests and 95% confidence interval was taken as the reference for statistical significance. Utilization of funds and health care providers was assessed based on the bank records and ledgers maintained by the NGOs.

#### 4.6 Ethical considerations

There was no open risk for the community/women. Since it was a research-cum-action experiment, there were benefits like empowerment, bank account, incentive, and improved healthcare access. By keeping the survey shorter, unnecessary details were eliminated besides minimizing the interview time. Repeat questions were eliminated by splitting household and individual questionnaires. Purpose and potential benefits/risks were clearly explained and those unwilling were excluded. Participants were also allowed to withdraw without any penalty and details of local contact persons were given to them. Separate informed consent was taken for survey and enrolment. The proposal was also subjected to ethical review and was cleared by an Institute Ethics Committee.

## 5. RESULTS

### 5.1 Survey results

As indicated earlier, the chosen areas (27 villages) can be considered as backward from banking, economic, human development, and social perspective. Total number of households included in the survey was 6,383 households housing 31,922 people. Basic profile of the surveyed population is given in Table-6; Figure-3 captures the interview context. Although the survey attempted to cover all the households in the chosen areas, despite best efforts, it ultimately covered about 80% of the total households. Major reasons for the non-availability of 20% of the households included temporary shifting of residences to neighbouring urban areas for employment purpose, visiting relatives in other rural/urban areas, and travel to participate in religious festivals. Since most of the missing households had nuclear families with fewer members, the survey covered most of the joint families with large number of people ranging from 7 to 18. In the absence of updated population figures for 2007<sup>1</sup> and given that the relative size of the missing households were found to be smaller<sup>2</sup>, it can be estimated that the population coverage could be about 90%.

**Table-6**  
**Basic profile of the surveyed population**

Number of villages surveyed	<b>27</b>
Population covered - no. of people	<b>31,922</b>
Number of households included in the survey	<b>6,383</b>
Forward community - no. of HHs (%)	<b>2,166 (33.9)</b>
Backward community - no. of HHs (%)	<b>2,140 (33.6)</b>
Most backward community - no. of HHs (%)	<b>749 (11.8)</b>
Scheduled Caste/Tribe - no. of HHs (%)	<b>1,323 (20.7)</b>
Below poverty line - no. of HHs (%)	<b>3,750 (58.8)</b>
Landless - no. of HHs (%)	<b>2,310 (36.2)</b>
Average size of the household - no. of members	<b>5.1</b>
Monthly income - Indian Rupees (US\$)	<b>1,561 (38.07)<sup>1</sup></b>
Proportion of earning members - % of HH members	<b>45.1</b>
No. of bank accounts per 1,000 people	<b>59.3</b>
No. of HHs holding bank accounts (%)	<b>1,489 (23.3)</b>
Average no. of bank accounts held by a household	<b>1.32</b>

<sup>j</sup> Available population data for 2001 indicated a smaller population size, less than the size of the population covered by the survey.

<sup>k</sup> As indicated by the neighbours, who were covered by the survey.

<sup>1</sup> 1 US\$ = Rs. 44.20 (2nd Jan. 2007) Source: [http://www.rbi.org.in/scripts/BS\\_ViewBulletin.aspx?Id=8313](http://www.rbi.org.in/scripts/BS_ViewBulletin.aspx?Id=8313) (accessed on 12th August 2008)

Given the sex ratio in rural areas in the chosen districts (960 per 1,000 men in 2001) and that about 40% of the population are below 18 years;<sup>56,121</sup> total number of women aged 18 years or above in the chosen villages can be estimated as 10,000. A total of 8,672 women were interviewed indicating that over 85% of the women in the population were interviewed. In other words, about 92% of the women from the households included in the survey were interviewed. Coverage of women was relatively better because most of the respondents were women household members, except in case of those who went to their parental homes for delivery.

**Figure-3**  
**Interviews with women in progress**



### 5.1.1 Socio-economic profile of the interviewed women

Mean age of the interviewed women was 37 years (range 18 - 85 years); 6% were aged 65 years or more. Forty per cent of the women lived in large households with six members or more. Nearly 60% came from poor households and 32.2% of them came from landless households. Mean monthly household income was reported to be US\$ 39 and 65.1% of the women represented lower social classes. Nearly 70% of the women were employed and the average personal income of those employed was US\$ 11.27. About 28% were literate, with 5.4% reading newspapers regularly; 22.2% viewed television

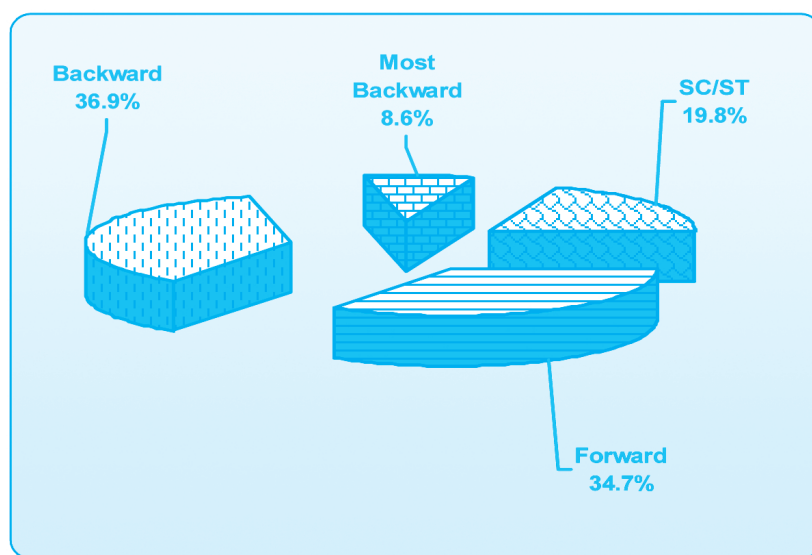


news regularly. About 30% had access to their own television while another 22.8% had access to other televisions (say, *panchayat* or local self-government television). Only 21% of women enjoyed the autonomy to seek health care for their own illnesses while 13% had the autonomy to spend money. In other words, only about 10% had the autonomy to seek health care as well as to spend money.

Over 36% of the surveyed households possessed no land. Two-third of the surveyed households were socially backward (33.5% belonged to the Backward Community, 11.7% belonged to the Most Backward Community, and 20.8% belonged to the Scheduled Caste/Tribe); the proportion of socially backward population very high (92.7%) in Mandya followed by 71.7% in Haveri and 35.5% in Dharwar. Average monthly income of the household was Rs. 1,561 (USD 39.03) - Rs. 1,606 (USD 40.15) in Dharwar, Rs. 1,508 (USD 37.70) in Haveri, and Rs. 1,566 (USD 39.15) in Mandya; 45.1% of the household members were earning members - 41.4% in Dharwar, 45.9% in Haveri, and 53.2% in Mandya. Over one-fifth (23.3%) of the households had bank accounts - 18.7% in Dharwar, 24.7% in Haveri and 27.5% in Mandya.

About 1.4 women per household were interviewed totalling 8,672 women covered by the survey. Average age of the women interviewed was 37 years and 82.3% were currently married. Backward and forward communities were dominant with Scheduled Caste/Tribe (SC/ST) making up for 19.8% of the surveyed women (Figure-4). Over two-third (69.4%) of the surveyed women were employed mostly as unorganized casual agricultural labour and 28.1% were literate. Over 50.0% had access to television (27.8% had their own TV) and 22.2% of the women viewed news daily while 5.4% read newspapers daily. Average monthly income of these women was Rs. 346.37/- (USD 8.66) while it was Rs. 497.67/- (USD 12.44) per employed woman.

**Figure-4**  
**Social profile of the surveyed women**



Over 30.0% of the women were found to consume adequate nutrition comprising of milk, fruits and vegetables. About 21% made their own decisions to seek health care; it was 54.9% for widowed/divorced women, 32.4% for the unemployed, 31.8% among the backward community, and 22.3% among the landless households. On the other hand, the proportion was low among women belonging to the forward community (9.3%) and married women (13.3%). Thirteen per cent women had had autonomy to keep/spend money; it was high among widowed/divorced women (24.5%), and among women belonging to SC/ST (21.8%) and the forward community (20.2%). The proportion was low among women belonging to the most backward community (5.8%), who were never married (5.9%), who belonged to the backward community (9.3%), who were married (11.6%) and the unemployed women (12.2%).

### 5.1.2 Willingness to participate and save

Out of 8,672 women surveyed, 4,601 women (53.1%) expressed their willingness to participate in the experiment, with the rate high among employed women and those who had autonomy to seek care; it was low among the unemployed and those who had no television access. The willingness to participate was modest given the results of an earlier study among the rural population in the same state (Karnataka).<sup>108</sup> His estimate of the willingness to participate in a community-based health insurance was 91.8% (Range 76.6-97.6%); in his study, the lowest social class (SC/ST) reported the highest willingness to participate (94.3%).

Average willingness to save per month was INR 38.26 (US\$ 0.87) or 2.2% of household income; regular news readers were willing to save 39.7% more and widowed/divorced women were willing to save 10.5% less. Details of willingness to save for various groups of women are given in Table-8. Mathiyazhagan estimated the maximum willingness to pay per annum as Rs. 163.48 (US \$ 4.49)<sup>y</sup> yielding a monthly average of US \$ 0.37 (range US \$ 0.27 - 1.37).

In a in Burkina Faso, WTP for a community-based insurance was found to be influenced by household income, gender, age and literacy;<sup>111</sup> while income and literacy had positive influence on WTP, age had a negative influence. The study also found that men had higher willingness to pay for insurance compared to women. In our study, poverty did not seem to have any impact on willingness to save; Poor women (below poverty line) were willing to save US\$ 0.83 or 2.4% of their monthly household income while the non-poor expressed their willingness to save US\$ 1.08 or 1.9% of their household income. In other words, poor women were willing to save more in relative terms. But, literacy played a role with literate women willing to save 28.4% more than the illiterate women. Figure-5 also explains that literate women were marginally above the illiterate women in all household income regimes. Similarly, those women with autonomy to spend money were willing to save 18.5% more than those who did have autonomy. However, autonomy to seek care did not alter the willingness much. Marital status was important for widowed/divorced women who were willing to pay 13.6% less than those who were married; of course, never married group was not affected.

<sup>y</sup> 1 US \$ = Rs. 36.40 (as on 31st October 1997).

Source: [http://www.rbi.org.in/scripts/BS\\_ViewBulletin.aspx?Id=6551](http://www.rbi.org.in/scripts/BS_ViewBulletin.aspx?Id=6551) (accessed on 19th August 2008)

**Table-7**  
**Women's autonomy and willingness to participate**

Women's status	No. of women	Having/lacking autonomy		Willing to participate	
		Number	%	Number	%
<b>Autonomy to seek care</b>					
Scheduled Caste/Tribe	1,710	274	16.0	217	79.2
Most Backward Community	743	123	16.6	82	66.7
Unemployed	2,634	853	32.4	534	62.6
Married	7,134	948	13.3	589	62.1
Widowed/ divorced	1,172	644	55.0	389	60.4
Employed	6,020	839	14.0	494	58.9
<b>All women</b>	<b>8,672</b>	<b>1,792</b>	<b>20.7</b>	<b>1,028</b>	<b>57.4</b>
Backward community	3,192	1,014	31.8	576	56.8
Forward community	3,003	279	9.2	151	54.1
Never married	366	100	27.3	50	50.0
<b>Autonomy to spend money</b>					
Most Backward Community	743	43	5.8	38	88.4
Never married	366	31	8.5	20	64.5
Backward community	3,192	297	9.3	180	60.6
Married	7,134	828	11.6	451	54.5
Employed	6,020	827	13.7	441	53.3
<b>All women</b>	<b>8,672</b>	<b>1,145</b>	<b>13.2</b>	<b>591</b>	<b>51.6</b>
Unemployed	2,634	318	12.1	150	47.2
Widowed/ divorced	1,172	287	24.5	121	42.2
Forward community	3,003	603	20.1	239	39.6
SC/ST	1,710	373	21.8	133	35.7
<b>Lack of autonomy to seek care</b>					
Scheduled Caste/Tribe	1,710	1,452	84.5	955	65.8
Most Backward Community	743	630	84.8	399	63.3
Employed	6,020	4,953	82.3	2,876	58.1
Backward community	3,192	2,174	68.1	1,244	57.2
Married	7,134	6,169	86.5	3,350	54.3
<b>All women</b>	<b>8,672</b>	<b>6,939</b>	<b>80.0</b>	<b>3,713</b>	<b>53.5</b>
Never married	366	263	71.9	128	48.7
Widowed/ divorced	1,172	514	43.9	241	46.9
Unemployed	2,634	1,964	74.5	843	42.9
Forward community	3,003	2,720	90.6	1,143	42.0
<b>Lack of autonomy to spend money</b>					
SC/ST	1,710	1,335	78.1	1,040	77.9
Most Backward Community	743	697	93.8	430	61.7
Employed	6,020	5,182	86.1	3,145	60.7
Widowed/ divorced	1,172	881	75.2	519	58.9
<b>All women</b>	<b>8,672</b>	<b>7,494</b>	<b>86.4</b>	<b>4,155</b>	<b>57.0</b>
Backward community	3,192	2,892	90.6	1,642	56.8
Married	7,134	6,294	88.2	3,493	55.5
Never married	366	335	91.5	160	47.8
Unemployed	2,634	2,288	86.9	1,016	44.4
Forward community	3,003	2,386	79.5	1,057	44.3

**Table-8**  
**Women's willingness to pay for *medisave***

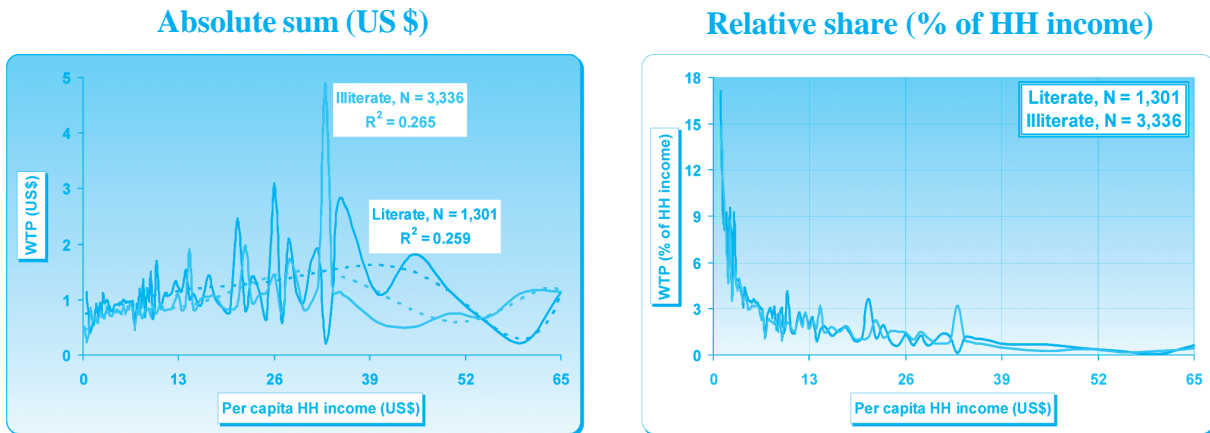
**Total no. of women 8,672**

Category of women	Women in the sample		Women willing to participate		Average WTP per month	
	Number	%	Number	%	INR	US\$ <sup>n</sup>
Reading newspapers regularly	468	5.4	236	50.4	53.46	1.21
Watching television news regularly	1,925	22.2	1,032	53.6	48.71	1.10
Non-poor	1,508	17.5	685	45.4	47.51	1.08
Literate	2,440	28.1	1,316	53.9	45.44	1.03
With autonomy to spend money	1,145	13.2	591	51.6	44.32	1.01
Backward Community	3,192	36.8	1,807	56.6	39.84	0.90
With autonomy to seek care	1,792	20.7	1,028	57.4	39.28	0.89
Married	7,134	82.3	3,799	53.3	38.92	0.88
Belonging to landless households	2,792	32.2	1,722	61.7	38.64	0.87
Unemployed	2,634	30.4	1,158	44.0	38.48	0.87
<b>All women</b>	<b>8,672</b>	<b>100.0</b>	<b>4,601</b>	<b>53.1</b>	<b>38.26</b>	<b>0.87</b>
Never married	366	4.2	177	48.4	38.25	0.87
Employed	6,020	69.4	3,442	57.2	38.20	0.86
Scheduled Caste/Tribe Community	1,710	19.7	1,127	65.9	38.16	0.86
With no autonomy to seek care	6,939	80.0	3,713	53.5	38.04	0.86
Most Backward Community	743	8.6	417	56.1	37.71	0.85
With no autonomy to spend money	7,494	86.4	4,155	55.4	37.39	0.85
Poor	7,110	82.5	3,902	54.9	36.63	0.83
Forward Community	3,003	34.6	1,242	41.4	36.22	0.82
Illiterate	6,179	71.3	3,281	53.1	35.40	0.80
Widowed/divorced	1,172	13.5	625	53.3	34.26	0.78

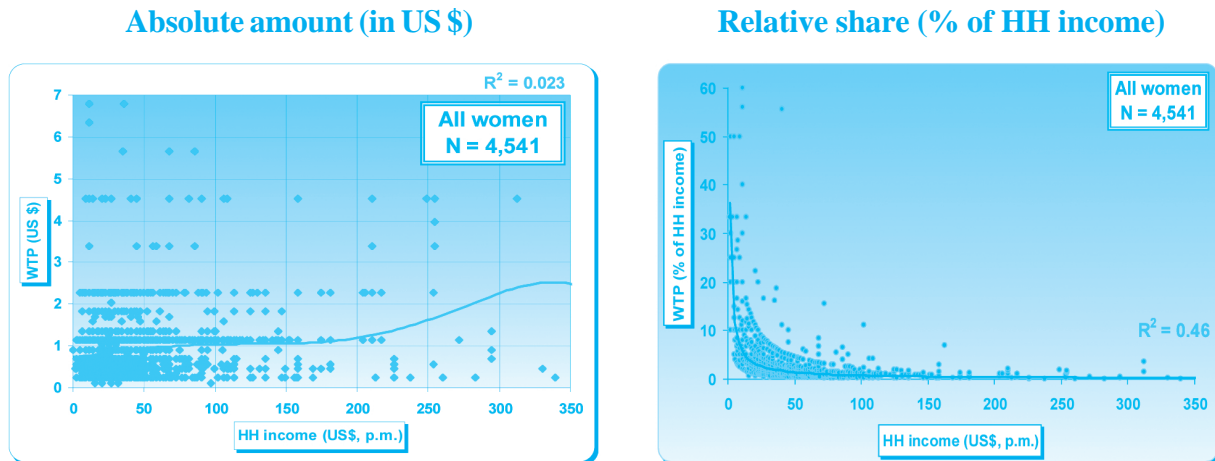
Household income did not play a significant role, except for the very high-income households (Figure-6). Regression results (although insignificant) showed that household income explained only about 2% variation in willingness to save; willingness to save increased by INR 2.90 (US\$ 0.07) for every increase of INR 1,000 (US\$ 22.63) in household income. In relative terms, however, willingness to save declined with the increase in household income. More or less similar pattern was observed with respect to personal income (Figure-7). There was also no relationship between the proportion of earning members in a household and women's willingness to save.

<sup>n</sup> 1 US\$ = Rs. 44.20 (2<sup>nd</sup> Jan. 2007) Source: [http://www.rbi.org.in/scripts/BS\\_ViewBulletin.aspx?Id=8313](http://www.rbi.org.in/scripts/BS_ViewBulletin.aspx?Id=8313) (accessed on 12<sup>th</sup> August 2008)

**Figure-5**  
Literacy and willingness to save(Footnotes)

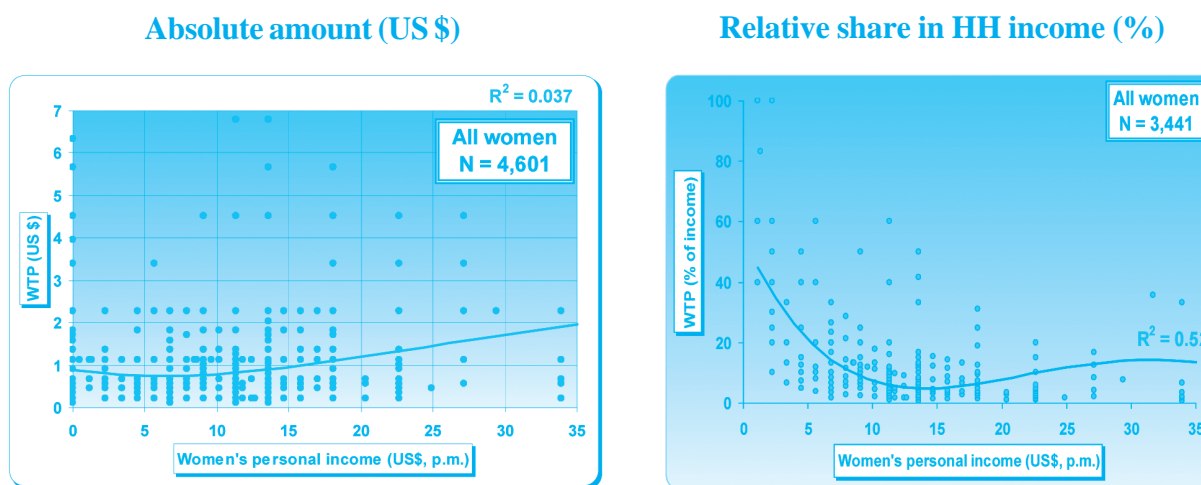


**Figure-6**  
Household income and willingness to pay for *medisave*



Provision of the matching grant increased the willingness to save by 92% from US\$ 0.87 to US\$ 1.67. Women belonging to the age of 46-55 years were willing to save 9.2% more than the average and 26.7% more than those who were aged 56-65 years (Table-9). Social class did not influence the willingness to save, as indicated by Figure-8; however, backward community people (second in the social class ladder) were willing to save more than others (Table-8). For all the social classes, willingness to save increased with the per capita household income up to a point (say, US\$ 40) before declining. But, the relative share of household income to be devoted to *medisave* declined with the increase in per capita household income.

**Figure-7**  
**Women's personal income and willingness to save**



**Table-9**  
**Age and willingness to save**

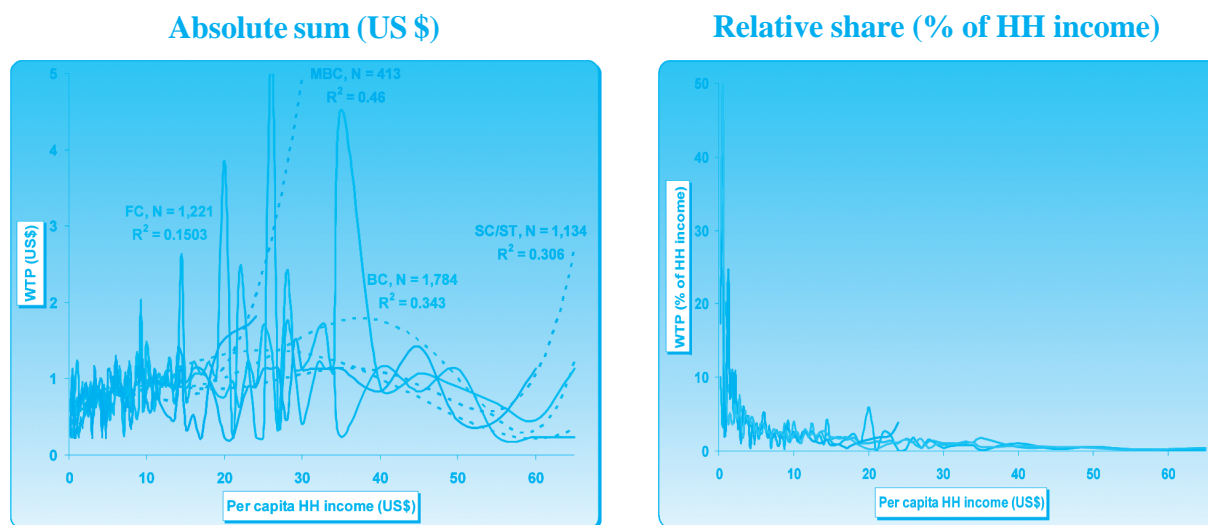
Age group of women (years)	Number of women	% to total	Willingness to save	
			INR	US\$
≤ 25	1,075	23.4	38.99	0.88
26-35	1,481	32.2	38.19	0.86
36-45	1,080	23.5	37.61	0.85
46-55	518	11.3	41.93	0.95
56-65	281	6.1	33.33	0.75
> 65	164	3.5	35.40	0.80
All women	4,599	100.0	38.26	0.87

In Mathiyazhagan's study,<sup>108</sup> the backward community people were willing to pay the maximum of US \$ 0.40 compared to US \$ 0.38 by the forward community and US \$ 0.37 by SC/ST. His study also found that the majority (52.9%) of the households preferred a comprehensive health care benefit package to a narrow package with limited benefits (say, hospitalization). While household size and household income significantly influenced the decision to join the insurance, age, caste and literacy were found to be irrelevant.

The literature found a positive association between the decision making power within the household and willingness to pay.<sup>109</sup> In our survey, women's autonomy to seek care only marginally improved the willingness to participate while their autonomy to spend money did not have any impact (Table-7); the impact was highest among the lowest social class (SC/ST). Age did not have any impact: average age

of both groups - willing or otherwise - remained at 37 years. As found in the literature;<sup>109,113</sup> personal income did play a role, although marginally; average monthly income of women willing to participate was US\$ 8.40 compared to US\$ 7.20 for other women.

**Figure-8**  
Social class and willingness to save



**Table-10**  
Household size and willingness to save

HH size	No. of women	Average monthly HH income			Willingness to save		
		INR	US\$	per capita (US\$)	INR	US\$	% of HH income
1	49	463	10.48	10.48	39.69	0.90	8.6
2	285	906	20.50	10.25	34.16	0.77	3.8
3	590	1,213	27.44	9.15	36.70	0.83	3.0
4	1,132	1,399	31.65	7.91	41.05	0.93	2.9
5	978	1,524	34.47	6.89	39.75	0.90	2.6
6	610	1,860	42.08	7.01	36.45	0.82	2.0
7	335	2,126	48.10	6.87	39.18	0.89	1.9
8	176	2,353	53.24	6.66	33.24	0.75	1.4
9	131	3,249	73.51	8.17	39.28	0.89	1.2
10	103	3,536	80.00	8.00	35.05	0.79	1.0
> 10	212	3,618	81.86	6.29	34.91	0.79	1.0
<b>5.3</b>	<b>4,601</b>	<b>1,715</b>	<b>38.80</b>	<b>7.32</b>	<b>38.26</b>	<b>0.87</b>	<b>2.2</b>

Family size was not a major determinant of willingness to save (Table-10); similar results were found elsewhere.<sup>113</sup> However, the relative share of household income to be allocated for *medisave* declined with the increase in the household size. Joint family was widely prevalent in the survey areas with the biggest household size reported being 18 (in 5 households); the average family size was 5.3. But, 49.2% of household members were involved in income generation activities. Still, per capita household income declined from US\$ 10.48 to US\$ 6.29 as the family size increased.

## 5.2 *Medisave* experiment results

Six hundred out of 4,601 women, who expressed their willingness to participate, were recruited for the *medisave* experiment. The enrolment was designed in such a way that they represented their respective population sub-groups. In other words, the group of women enrolled included women from all socio-economic sections - poor and non-poor, literates and illiterates, highest and lowest social class, autonomous and non-autonomous, etc.

### 5.2.1 Socio-economic profile of the enrolled women

Socio-economic profile of the enrolled women is given in Table-11. The extreme top left cell in the table indicates the most disadvantaged women - belonged to the lowest social class; were in poverty; were illiterates; and decisions about their own health care were taken by some one else in the household. Such women accounted for 6.9% of enrolees. On the other hand, the bottom right extreme cell represents the relatively advantaged women - belonged to the highest social class (forward community), were out of poverty; were literates; and enjoyed complete autonomy to seek health care for themselves. Such women represented 1.3% of the enrolees. In other words, enrolees came from the entire socioeconomic spectrum. In rural context, however, lines separating various socio-economic sub-groups are often thin although extremes are clearly distinguishable.

As against 60% of poverty in the overall context in the study areas, the rate of poverty among the enrolees was 79.2%. Similarly, 69.3% of them came from lower social classes as against the population average of 65.1%. In other words, more proportion of poor and socially backward women were enrolled compared to their representation in the population. On the other hand, proportion of illiterate women exactly matched with the local population figures. However, proportion of women having autonomy to seek health care was higher (53.5%) for enrolees than others.

### 5.2.2 *Medisave* process

The highlight of the *medisave* process was the active participation of women in review meetings. Enrolees enthusiastically participated in such meetings and learnt about various features and processes. In fact, this empowerment was one of the major long term outcomes of the experiment. Figure-9 provides the snapshot of enrolees participating in one such routine review meetings. The meetings were usually organized in temples. Spouses of these women too came along with them in the beginning, but they stopped coming once confidence was established.

Enrolees, on their part, gathered together in groups every month to collect and consolidate the deposits of the enrolees and took turns to deposit the sums in the respective bank accounts so as to reduce the



transport cost. Since the women were taught to read the passbook, they checked the entries in their respective passbooks once the care taker woman returned. Although about 80% were very poor, no dispute concerning misappropriation of money was reported from any one of the 27 villages. Figure-10 captures a view of a bank holding *medisave* accounts.

**Table-11**  
**Socio-economic profile of the enrolled women (no. of women)**

SOCIAL CLASS	LITERACY	ECONOMIC PROFILE						TOTAL
		Decision making on own health care						
		Below Poverty Line			Above Poverty Line			
		Others	Joint	Self	Others	Joint	Self	
Scheduled Caste/Tribe	Illiterate	<b>41</b> <b>(6.9)*</b>	19 (3.2)	27 (4.5)	4 (0.6)	3 (0.5)	2 (0.3)	96 (16.0)
	Literate	8 (1.4)	5 (0.8)	5 (0.8)	3 (0.5)	2 (0.3)	1 (0.2)	24 (4.0)
Most Backward Community	Illiterate	16 (2.7)	14 (2.4)	12 (2.0)	4 (0.6)	2 (0.3)	0 (0.0)	48 (8.0)
	Literate	4 (0.6)	3 (0.5)	1 (0.2)	3 (0.5)	1 (0.2)	0 (0.0)	12 (2.0)
Backward Community	Illiterate	59 (9.9)	21 (3.5)	51 (8.5)	16 (2.7)	4 (0.6)	4 (0.6)	155 (25.8)
	Literate	33 (5.5)	9 (1.5)	24 (4.0)	9 (1.5)	3 (0.5)	3 (0.5)	81 (13.5)
Forward Community	Illiterate	33 (5.5)	30 (5.0)	19 (3.2)	17 (2.9)	11 (1.8)	5 (0.8)	115 (19.2)
	Literate	19 (3.2)	14 (2.4)	8 (1.3)	11 (1.8)	9 (1.5)	<b>8</b> <b>(1.3)</b>	69 (11.5)
<b>Total</b>		<b>213</b>	<b>115</b>	<b>147</b>	<b>66</b>	<b>36</b>	<b>23</b>	<b>600</b>

\* Figures in parentheses are percentage to total (600)

**Figure-9**  
**Enrolees in a review meeting**



**Figure-10**  
**One of the account holding banks**



### 1.1.1 Resource mobilization potential

In one year, 599<sup>o</sup> women together saved INR 274,297 (US\$ 6,206); average saving per woman was INR 458 (US\$ 10.36) or 2.3% of their annual household income. All the women, except 17.7% of them, visited the bank at least twice and 19.7% at least 10 times during the year to deposit money. Together with the financial incentive (US\$ 9.57) and the bank interest (US\$ 0.41), total money available for outpatient care per woman per annum was US\$ 20.34 (range US\$ 0.48 - 46.49) or 4.5% of their annual household income; the financial incentive did not seem to have influenced the saving behaviour much because only 44.2% of the allocated financial incentive was used. Given the cost of outpatient care among those who availed the facility (US\$ 1.92 per episode for consultation and medicines), the

<sup>o</sup> One woman died after the enrolment

accumulated money would be sufficient to treat about 11 episodes per woman per year. Average number of illness episodes reported among these women was 2.1 per annum indicating that their savings alone would be sufficient to finance all their outpatient care needs.

Pearson chi-square test results indicated that social and employment status were not a major determinant of annual savings (Table-12). In fact, socially backward and unemployed women saved more than the socially forward and employed women; the former contributed 40.5% to total saving. Multinomial logistic regression results showed an Odds Ratio of 1.948 (CI 95%) in favour of the socially backward class women in comparison to the socially forward class (Table-13). Similarly, the Odds Ratio for the employed is found to be 0.554 indicating that the unemployed were more likely to save than the employed. Similarly, age, literacy, autonomy and poverty did not influence annual saving.

**Table-12**  
**Aggregate annual savings by socioeconomic status, age and autonomy:**  
**Pearson chi-square test results**

Socioeconomic group	No. of women	Average annual saving		Share in total saving (%)	P value
		INR	US\$		
<b>Social status</b>					
Forward	180	436.21	9.91	28.6	0.001*
Backward	232	478.36	10.87	40.5	
Most Backward	49	489.80	11.13	8.8	
Scheduled Caste/Tribe	139	437.41	9.94	22.1	
<b>Literacy</b>					
Literate	192	455.12	10.34	32.1	0.809
Non-literate	408	457.16	10.39	67.9	
<b>Poverty</b>					
Non-poor	115	442.91	10.07	18.6	0.151
Poor	485	460.64	10.49	81.4	
<b>Health care autonomy</b>					
Autonomous	142	428.29	9.73	22.2	0.314
Non-autonomous	458	466.13	10.59	77.8	
<b>Financial autonomy</b>					
Autonomous	112	456.21	10.39	18.6	0.239
Non-autonomous	488	457.38	10.40	81.4	
<b>Employment</b>					
Employed	458	442.94	10.07	74.0	0.043*
Unemployed	142	503.04	11.43	26.0	
<b>Age (years)</b>					
18-30	250	478.17	10.87	43.6	0.373
31-45	255	435.63	9.90	40.5	
46-60	85	464.82	10.56	14.4	
60 <sup>+</sup>	10	416.00	9.46	1.5	

\* Statistically significant

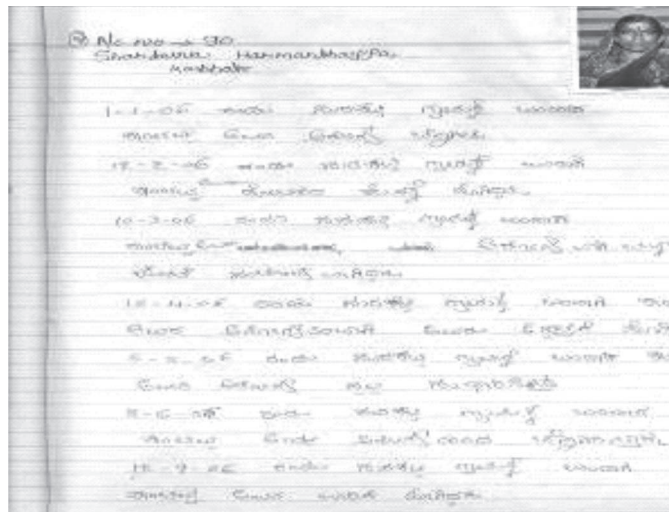
### 5.2.3.1 Willingness Vs ability to save

For these group of women, their actual saving more or less matched with their willingness to save; their average annual saving was US\$ 10.36 while their average willingness was US\$ 10.44. However, actual savings exceeded their willingness in the case of 330 (55.1%) women while it fell below 25% for 75 (12.5%) women. Although the range of actual annual contributions (US\$ 0.23 - 23.76) fell within the willingness to pay range (US\$ 0.11 - 27.27), there was no direct influence of willingness to pay on actual contribution. This was true for all the socioeconomic groups including the literates and those who had financial and health care autonomy.

### 5.2.4 Resource use for outpatient care

Ledgers maintained by the NGOs captured the health status and health care seeking behaviour of the enrolled women; Figure-11 shows one of the ledger pages. Periodic (every two weeks) documentation of their health care utilization (or non-utilization) revealed that there were a total of 1,256 illness episodes (2.1 per woman) reported by the enrolled women; 31.2% of them did not report any illness in one year. Out of these, 55.6% of the episodes received treatment; the designated physicians accounted for 61.2% of them. That is, *medisave* financed about 61.2% of the women's annual outpatient care (OP) bills; it could be even more because the cost of care was low elsewhere (government facilities or less than fully qualified practitioners, LTFQs). Over 70% of them sought care when ill and 38.3% of the ailing women went to the designated physicians. Rest of them received care from government facilities or LTFQs.

**Figure-11**  
A page from a ledger of an enrollee



Reasons for their OP visits (from designated physicians or others) were cold, cough or mild fever (21.4%), body pain (17.9%), antenatal care (14.3%), and reproductive health problems (10.7%). Most cited reason for non-treatment was non-serious illness (requiring home remedy). Women bypassed designated physicians due to their inconvenient timings or because the alternative was free (government facilities) or cheap (LTFQs). Figure-12 shows an outpatient care setting.

**Table-13**  
**Social class, income earning and *medisave*: Results of logistic regression analysis**

Variable	Reference group	Odds Ratio	P value
Socially backward class	Forward class	1.948	0.004*
Income earner	Non-earner	0.554	0.001*

\* Statistically significant

A total sum of Rs. 36,278 (US\$ 821) or 13.2% of their annual saving was spent on outpatient care consultation and medicines); overall, 6.8% of the total available balance (savings + matching grant + interest) was used in one year. Average outpatient care spending per woman was US\$ 2. Average cost per episode was estimated as US\$ 1.92. A bulk of the spending was on consultation fees and medicines.

**Figure-12**  
**A scene from an outpatient care clinic**



### 5.2.5 Resource use for outpatient care

Women or their family members sought inpatient care for accident-related surgery, other surgery, delivery (normal or C-section) and other hospitalisations. Figure-12 shows the inpatient care setting of a woman patient. Only less than 5% of the enrollees or their family members availed health insurance benefits in each district. Total claim by each enrollee ranged between US\$ 90 and US\$ 225. However, the experience with health insurance was not pleasant for them mainly because many claims were related to the pre-existing illnesses not covered by the insurance. Similarly, some deliveries were not covered for the same reason. Although stated to them prior to the enrolment, they did not comprehend the term 'pre-existing conditions'.

**Figure-12**  
**A woman enrollee receiving inpatient care**



### 5.2.6 Observations from the field

In addition to quantitative details concerning health status and health care seeking, the ledgers also captured some qualitative observations. Besides, independent evaluations were sought from another women's NGO not involved in the study and a gender expert. Some of their key observations are quoted here.

### 5.7.7 Enrollee observations

Enrolees were generally found to be very enthusiastic about the experiment and made some positive observations about their experience with *medisave*. Many enrolees repeated similar observations and we quote some of them.

*“Because of medisave,<sup>p</sup> I am regularly going for antenatal care visiting the same doctor. Or else, I would have skipped some visits and visited different doctors for different visits”*

- A woman (22 years) from *Kalkotti* village, Haveri district

*“Now, I have money in my account and hereafter I don't have to run around for money when I fall ill.*

- A woman (28 years) from *Thyloor* village, Mandhya district

*“We are happy about medisave. It is a new type with rich benefits for the BPL (Below Poverty Line) families.”*

<sup>p</sup> *Medisave* was called as *mediseva* by the local community

*“Some of us have not seen a bank before. Now, through this experiment, we are getting an opportunity to know about a bank and its operations. We can take advantage of it and utilize bank services hereafter.”*

*“We have learnt to save money for future health purpose.”*

- Participants in a routine enrollee meeting, *Gangigatti* village, Dharwad district

### 5.2.8 Non-enrollee views

Some non-enrollees too expressed their views on *mediseva* during some public meetings organized to explain *mediseva* features and progress. We quote some of them as observed by both women and men.

*“Mediseva helps us to save before we are ill. Hence, I would like to join”.*

- A woman (40 years) from *Kalkotti* village, Haveri district

*“From my village alone, another 100 people are willing to join this. Unlike SHGs, which promotes savings and investment, mediseva is the only one for health purpose”.*

- A woman (30 years) from *Thyloor* village, Mandhya district

*“We are seeing the beneficiaries going to hospital although they are poor. These are the people who never visited a hospital before. They have demonstrated that we could also do so if we join mediseva”.*

- A man (60 years) from *Thyloor* village, Mandhya district

### 5.2.9 Evaluation by a gender expert

A public health expert with gender specialization carried out an independent evaluation of the experiment. Her comments presented during the dissemination workshop are presented here. She observed and we quote,

*“An earlier study in Karnataka has clearly demonstrated that people, even those from low-income and low-literacy levels, are able to make ‘rational’ choices in health. Building upon those efforts, this experiment attempts to overcome one of the shortfalls experienced in most SHGs - women are never able to use the resources that they garner for their own health purposes. By bringing formal sector banking facilities closer to individual women, this initiative attempts to help women to move closer to the monetized global economy. It also extends the understanding of socially responsible banking beyond the present opening of rural branches and loan schemes for farmers”.*

From the analysis we can see that the willingness of sets of women to participate in the study itself is indicative of their ability to make decisions for themselves – upper caste and unmarried women found themselves were less able to participate or perhaps did not feel the need to participate. The analysis

also indicates that some women were not able to save enough to reach the upper limit of the matching grant of rupees eighty offered by the bank. While these efforts at reaching out to the poorest of the poor and most vulnerable groups – particularly women is commendable, clearly we have a long way to go to empower women. We still need to reach out to those women who were not able to save even a minimum amount a month. Perhaps we also need to consider alternative collective protections where these women are also safe – a kind of cross subsidization that happens in the insurance sector. The intervention demonstrates the following points clearly:

- Standards of formal banking institutions can be lowered to include the lower rungs of people in our society – it is possible and needs to be done. But this situation also begs the question, how and who set up these standards in the banking sector that excludes a greater chunk of our population?
- The study also extends the understanding of socially responsible banking beyond the present opening of rural branches and loan schemes for farmers, etc.
- More work needs to be done at grass roots for women to be empowered in due course for them to manage to prioritise their health, without such external impetus.

Another evaluation was also carried out by a health economist. He brought the development dimension of *medisave*, particularly its potential to create economic opportunity for the women and its link with their health care seeking. He observed that the prevailing SHG environment was conducive for the success and scaling up of the *medisave* experiment.

#### 5.2.10 Evaluation by a women’s NGO

In order to secure an external opinion on the progress and achievement of the experiment, an evaluation was carried by a women’s NGO. This NGO operates in the neighbourhood of Mandhya district and its evaluation was carried out in Mandhya district. Here are the main observations.

*“Medisave tries to develop a contribution model and has identified the real-needy beneficiaries. With all enthusiasm, the local NGO and Bank functionaries have motivated the poor to start banking for better health. The bank, Insurance Company, the local NGO, health care providers, women beneficiaries, non-beneficiaries, and everybody are enthusiastic and expressed satisfaction about its functioning and desired that it should continue for some more time as they feel the gestation time to utilize the benefits is short. The District (Health System) Commission has also expressed its willingness to recommend the model to the government of Karnataka for replication. The enrolees are acting as change agents and motivators for the rest of the community to think and act on their participation in the experiment”.*

However, discussion with women beneficiaries showed that they are in confusion on matters viz. “Whether this project continue or not, why only four members are covered?” Some women said “We have more than two children, why not our other children covered under the scheme? They said “it would be nice



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if all the members in our house are covered”. Also, the limitations of a project contribution model are:

- It makes people to depend psychologically on the partial amount to come from outside
- It leads to shoulder lesser responsibility on the part of beneficiaries.
- Concept of paying full premium amount has to be developed among beneficiaries very strongly otherwise they stick on to their old of school of thought viz., “Why to save i.e., pay premiums from now itself. We can use this money for our other day to day needs and mobilize money for medical purpose when we fall sick”.

Local health system development teams also visited two of the experiment sites in two districts and met the enrollee women.

## 6. CONCLUSIONS AND LESSONS LEARNT FROM THE EXPERIMENT

*If we want health development to work as a poverty reduction strategy, we must have health systems that reach the poor.*

- Dr. Margaret Chan

Director General, World Health Organization

Previous experience with health insurance among the poor suggested that poor households may prefer alternative mechanisms to health insurance to cope with financial risks, like income diversification, credit and savings. Based on this understanding, this project attempted to develop an alternative health financing mechanism viz., *medisave* to finance outpatient care even while insurance could cover the inpatient care. The basic conceptual model behind the *medisave* experiment advocated a combination of savings and insurance to finance health care. The overarching goal was to streamline and, to some extent, minimize the household out-of-pocket spending on health. The experiment combined women's empowerment and banking approaches to do that. Women's empowerment and rural banking have already received considerable attention in India following the advent of microfinance. However, non-insurance mechanisms, fairly successful in other sectors, are weak in health sector. So, the experiment was new and challenging to this extent.

### 6.1 Main conclusions

*Medisave* seems to have acted as a pre-payment option for health and streamlined the household out-of-pocket spending to the extent of 84.1% compared to the household out-of-pocket health spending in Karnataka.<sup>56</sup> It also brought additional resources into health because saving plus incentive exceeded the state out-of-pocket spending by households by 55.2%. Considering low per capita rural health spending, especially by women, and the fact that the saving was meant for only outpatient care, the real increase would have been manifold.

In addition, *medisave* linked women with qualified practitioners. Some women went to qualified providers for the first time and women mentioned that they had completed the full course of antenatal care mainly due to *medisave*. Deliveries, which otherwise would have occurred at home, were attended by qualified gynaecologists in well-equipped institutions. Still, 44.4% of the illness episodes were untreated either because they were non-serious or were 'treated' at home. Similarly, 38.8% of episodes received treatment from other sources due to their suddenness, and availability of 'close' substitutes. The average cost of treatment of treatment at a government health care centre in Karnataka was estimated at Rs 20 per visit,<sup>122</sup> which was double compared to the negotiated fee under the *medisave* project.

Poor women enthusiastically participated in the project and the overwhelming support received from non-enrolees signalled the satisfaction of the enrolees about *medisave*. Looking at the enthusiasm among non-enrolees towards the end, we are confident that the willingness to participate and save would really go up if we conduct a survey now. The 'save before illness strikes' message really reached the community. The fact that most of the women, who opened their first-ever bank account, continued even after the project ended indicates this.

The purpose of this experiment was not to promote *medisave* as a resource generation mechanism. Main drawbacks of *medisave* as a resource generation tool are:

- It shifts health care responsibility to individuals
- It cannot pool resources - across the rich and the poor or across the healthy and the sick
- It does not reduce the reliance on OOPs; it only makes it somewhat predictable.
- It is not equitable because it facilitates health care only according to the ability pay.

The experiment merely demonstrated that *medisave* could be used as a prepayment mechanism to streamline OOPs, where it exists and where other alternatives failed. It can be employed only as a transitory tool before a pooled and equitable health financing mechanism is fully developed or as a supplementary tool to finance certain inputs such as medicines that are not covered by pooled mechanisms such as tax funding or insurance.

## 6.2 Activities carried out under the project

The completion of the project required 12 major activities with specific target groups and methods; the activities, target groups, and methods employed in brief are given in Table-14. Several actors were involved in the project activities including an academic institution, a government national bank, three women's NGOs, community, seven physicians, three hospitals, a government insurance company, and women. In nutshell, the overall experience with this experiment has been challenging, but pleasant. We received considerable support from various stakeholders.

## 6.3 Lessons learnt: Can *medisave* be a sustainable option?

Despite a reasonable success of the project, we would like to share some thoughts based on our experience. There were challenges right from the conception to the field execution. When the experiment was planned, certain basic doubts cropped up about its value addition and relevance to the local health financing context, particularly concerning the poor women. Such doubts can be summarized under the following six broad headings:

- Women's willingness and ability to participate
- *Medisave*'s resource potential
- Health care seeking and resource utilization
- Ethical issues concerning banking and health care
- Health insurance as a complementary option
- Sustainability

The major concern was about the feasibility of such an experiment in a resource-poor settings where gender power relations, particularly concerning health care and finance, are unfavourable to women.

**Table-14**  
**Activities performed under the project**

ACTIVITY	TARGET GROUP	METHOD
<b>Choice of areas and population</b>	Rural districts & disadvantaged villages	Districts targeted for development & areas under lowly served bank branches
<b>Partnership with women's NGOs</b>	Reputed women's NGO	Existing NGOs' track record with the bank and the community
<b>Community consent, and formation/ convening of advisory boards</b>	Community leaders, physicians, and bank managers	Community (women) leaders with standing, and reputed physicians with at least one woman member
<b>Population-based survey</b>	Entire population in the chosen 27 villages	2-phased (family/individual) house-to-house survey with repeat visits
<b>Identification of women for enrolment</b>	<ul style="list-style-type: none"> <li>▪ Women willing to participate</li> <li>▪ Women from all social categories</li> </ul>	<ul style="list-style-type: none"> <li>▪ Women classified by age, class, literacy, economic status &amp; lifestyle.</li> <li>▪ Final list had weighted representation of all groups</li> </ul>
<b>Consent seeking and enrolment of women</b>	List of women identified through the survey and those consented were enrolled	<ul style="list-style-type: none"> <li>▪ Those unwilling replaced by others (same socioeconomic &amp; age group)</li> <li>▪ Special accounts (minimum balance Rs. 10) were opened</li> <li>▪ Women &amp; 3 family members were insured (coverage Rs. 10,000 p.a.)</li> </ul>
<b>Section of health care providers</b>	Short-listed providers	<ul style="list-style-type: none"> <li>• Short-list based on women's and community leaders' preference</li> <li>• Finalized after qualification check</li> <li>• Same method for hospital providers</li> </ul>
<b>Choice of insurer</b>	National level government insurers	The insurer with favourable group insurance policy for rural people
<b>Monitoring of health status, savings, care, and insurance claims</b>	Enrolled women	NGOs paid periodic visits to women's homes to check their health and health care status and to solve problems pertaining to savings and insurance claims, and to banks to monitor savings
<b>Independent mid-term evaluations</b>	Enrolled women	By women's NGOs in neighbourhood and by government supported health system development teams
<b>Resurvey of enrolees and controls</b>	Enrolled women and their matched (twice) controls	A short questionnaire to capture the difference in health care seeking
<b>Dissemination workshop</b>	Government officials, community leaders, media, development NGOs, physicians, academicians, enrolled and other women	<ul style="list-style-type: none"> <li>• Individual invitations were sent to all invitees</li> <li>• Feedback was obtained through deliberations</li> </ul>

### 6.3.1 Conceptualisation

The concept of medical savings account (MSA), particularly from a rural perspective in India, was new and difficult to comprehend for many. Basic apprehension was that MSA attempts to pass the health care responsibility from the government to individuals because individuals are required to save for their own health care. Also, it was thought that resources generated might not be enough to adequately cover the health care costs. Since insurance was not part of the original conceptualisation, one single hospital episode might eat away the entire saving, however big it might be. The concept was debated in detail and it was realized that even rural people incurred a huge out-of-pocket spending on health, more often financed through distress efforts. Such out-of-pocket spending was thought to be more dangerous than saving money before illness strikes. But, the insurance requirement was given a serious thought and group health insurance was added as a component of *medisave* later. It was hoped that the household medical saving would be enough to cover the outpatient care spending while group health insurance must take care of the inpatient care expenditure. So, the ‘*save for OP and insure for IP*’ model emerged.

### 6.3.2 Partnership building

Being an action research, it required the cooperation from different partners, bank and NGOs particular. So, finding suitable partners was a challenge. Since resource mobilization was involved and there could be a lot of misconceptions or even rumours about the safety of the money, the first major requirement was to find a suitable ‘fund holder’. We opted for a government national bank with rural branches. Nevertheless, the bank is a different entity and thinks differently. From a business perspective, the value added was insignificant especially when the money involved was very small. At the same time, the work involved was significant because it had to maintain large number of accounts with very small sums of numerous deposits; or in some cases, there was no intermediate deposit. Hence, it took some time to convince the bank about the (social) value added to it.

Another major task was to identify suitable NGOs with reputation because the field execution of the concept depended a lot on them. In the end, we found three NGOs with three different faces - one was a fresh new NGO with very limited exposure to the community; second one was a part of a larger network organization generally involved in education and rural development; and the third one was engaged in for-profit business with a history of involvement in women’s empowerment.

Identification of a suitable insurer for the group health insurance was the third major task. Like the bank, insurance too operates differently; revenue mobilized was too little whereas the risk added was probably huge. In other words, the gap between the premium and the expected benefit was probably big to start with. However, insurance enrolment was smooth, as it was a group health insurance with a smaller benefit package.

The study probably achieved more than its money’s worth because of the near-perfect understanding among the study partners and support received from various stakeholders. Although many institutions with diverse goals were involved in the study, smooth conduct of the study was never in doubt. However, it took time in the beginning to get the action-research views across to different study partners. Once the common rhythm was achieved, smooth conduct of the study was ensured.

### 6.3.3 Community rapport

Community involvement and more importantly, community acceptance was very crucial for the implementation. The study had two parts - survey research and action. The second part proved to be much more challenging. Three different communities and 27 different villages with varied socio-economic backgrounds were involved. All the three communities reacted in three or more different fashions. It was a smooth affair right from the beginning in one place where all the nine villages cooperated with the team very well. There was no major difficulty in the second district as well although we had to meet people in each village separately to explain the study features.

In the third, however, it was a different story from the beginning. In one village, men did not allow their wives, sisters or daughters to participate in the discussion meetings and we dealt with men on behalf of the women to begin with. The rapport was slowly built and the women started participating in all the review meetings. In another village, people thought that we might part with the money mobilized since they had previous bitter experience with another 'informal' saving. They were not aware of the banking process and the bank was not located in this village. We had to teach them about the banking, the passbook and its entries. They probably trusted us only after seeing their passbooks with proper entries of their deposits. A visit by the local health system development team and their assurance about the authenticity of the study also helped. In the third village, people thought that the study had a 'hidden agenda'. This required a different kind of rapport building through one of their community leaders. In fact, the idea of a community advisory board emerged from that village. Once the board was formed with their own leader, a popular doctor and the bank manager being part of it, the trust was established.

All the rapport building efforts with the partners and the community demanded sustained efforts and therefore, required a lot of resources.

### 6.3.4 Survey and enrolment

The process of enrolling women into the Medisave project was initiated in January 2006 and completed by July 2006. The delay in some areas was due to refusal of some women to participate and a fresh list of substitutes had to be prepared after several attempts to make enquiries into their change of mind. Also, there was some delay in getting the consent form filled from those who expressed willingness, as they were absent during the visits to seek consent form filled. In some areas, some women changed their address and moved to nearby towns. It took some time to establish the change after making several visits to their given houses. There were also confusions about the project intension in few villages. Meetings of women, their family members, and some community members had to be conducted to clear their doubts about the project.

The delay in some were areas was due to a combination of factors. First of all, the survey was completed late due to local factors in areas which were involved in Cauvery issue. Second, there were shortages of passbooks due to which the bank delayed the account opening. Without passbook, women would have been apprehensive about the very intent of the project, as the passbook is the only record for them. Third, since health insurance is also provided as part of the project, there was some delay in initiating the insurance as most women did not have photographs required for issuance of insurance cards.

### 6.3.5 Women's willingness to participate

Willingness to participate, in reality, carries two different connotations viz., hypothetical and real. When the women were given a well explained hypothetical *medisave* situation and asked whether they would consider joining, the reply was quick and straight forward; 53% expressed their willingness to join and 47% declined. Later on, it was clear to us that a mere expression of willingness in a survey context was different from actual willingness to join. Even those who expressed their willingness to participate during the survey declined to enrol; the rejection rate was near 100% in some places. The willingness rate of 53%, expressed during the survey, probably declined to about 30% at the time of enrolment. Even the promise of a financial incentive in the form of a matching grant did not help; in fact, it made them to think that the intention was to 'cheat' them. In some places, although initial willingness was many times higher than the required number to enrol, we did not have adequate number of women to join and we had to approach those women who expressed their unwillingness during the survey; they agreed too.

The decline in willingness was mainly due to their ignorance about the banking process. Since money was involved and the fact that they were predominantly poor, women simply refused to part with their hard earned money even if it was a deposit with a government bank. In some cases, men took the position that women from their household expressed their willingness without consulting them since it was only a survey. They did not allow the women to join; they did not even allow the enrolment team to meet the women to seek their consent. It required several rounds of group meetings with men and women separately and together to explain the concept of *medisave*. The formation of a community advisory board with a prominent community leader, physician and the bank manger finally helped the cause.

The initial rate of willingness to participate (53%) itself was relatively low compared to the rate expressed in an earlier survey on willingness to pay for a community-based health insurance in the same population. This may be due to the complexity of the term '*medisave*' compared to the term 'insurance', which was already known to the rural population because life insurance has been in use for nearly four decades.

After six months of *medisave*'s introduction in the area, the willingness rate shot up very high, probably to reach about 80%. Those who declined to join after expressing their willingness during the survey came back to ask whether they could participate. The women who expressed their unwillingness during the survey too came and said that they did not thought that their opinion would count in the actual enrolment. Their negative reply, they said, was mainly due to the reason that they were not able to consult men or seniors in the household at the time of the survey. Meetings held by two high profile government health system teams on this project also increased the awareness about *medisave* and built confidence about the experiment among the population.

#### 6.3.5.1 Lesson

Willingness to save/pay based on a population survey has its limitations to serve as a programme planning tool. The rate of willingness tends to be high in an entirely hypothetical situation, wherein no programme is planned or explained. The rate declines in a quasi experimental situation, wherein the willingness is estimated for a particular programme with clear description. It further declines in a real

programme context, wherein the willingness is sought to actually enrol into a programme. Demonstration of benefits, however, boosts the rate of willingness. In this experiment, the key message delivered was ‘save before the illness strikes’.

### 6.3.6 Women’s ability to participate

Since *medisave* meant two entirely new aspects - banking and formal health care - for many women, it took a while and some efforts before the women actually participated (making deposit when possible and seeking care when needed). After the enrolment, enrolees were met individually and collectively to make them aware of the banking, health care and financing processes. They were taught about the ‘know-how’ of a bank passbook, particularly to verify various entries such as the deposit, matching sum, and the interest. Also, they were informed about the notebooks (in which the physician entered the treatment and cost of care details) and the need to carry them with them. The initial hurdle in the banking process was the required mandatory minimum balance of about US\$ 5, which was a big sum for the rural women to ‘lock up’. Several months of saving was required to accumulate just the minimum balance because they saved in small increments of, say, US\$ 0.20 - 1.00. The bank finally agreed to keep the minimum balance down to US\$ 0.20 for these women. Another constraint was that the women did not have any photograph of their own and the bank required their photographs. In some rural areas, women were not allowed to be photographed due to cultural reasons. All these hurdles had to be overcome before they opened their accounts.

After the opening of their accounts, many women did not initially turn up to the bank to deposit money for about two months because they wanted to wait for others to make the first move. Since they did not fully understand how the banks operated, they were hesitant to deposit money without knowing what would happen to their deposits. The visit of a government health system development team to explain about the experiment served as an assurance and the enrolees started making deposits periodically. Only three women out of 599 actually deposited during all the twelve months.

Some villages were hard-to-reach places and lacked frequent public transport. Since the bank was located in another village and the women would lose wages (besides transport cost) if they attempted to go the bank, the women had to make alternative arrangement to deposit the money. In such cases, the enrolees formed a group and on each occasion, one woman collected the deposit from others and travelled to the bank to deposit the money into the individual accounts. Since the women were taught to read the passbook, they checked the deposit and the balance after the every deposit was made.

The women required about a week to accumulate even a small amount of US\$ 0.20. They make ‘local’ savings of very small amounts to build it considerable enough for a bank deposit. They kept their local savings underneath their pillow, if they had one, or inside an earthen pot. These were thought to be ‘safe’ places within the household. There were instances of other household members, mostly men, ‘stealing’ such small savings before reaching the bank. However, the women felt that such instances of men taking away money from them were reduced because of *medisave*. Some men did not allow their household women to make ‘dead’ investments because they were not allowed to withdraw the deposit for any other purpose than health.



### 6.3.6.1 Lesson

There exist knowledge and infrastructure bottlenecks slowing down the implementation process of programmes that target empowerment and full participation. There are household barriers too while accumulating enough savings to make a deposit.

### 6.3.7 *Medisave's* resource potential

Average annual domestic saving (without the matching sum and bank interest) per woman was US\$ 10.36. This is equivalent to 72.3% of the annual per capita OOPs (US\$ 14.33) in Karnataka. If the incentive and the bank interest are added to the domestic savings, then the total sum available for health care through *medisave* was US\$ 20.29 per woman or 141.6% of the estimated OOPs per capita. In other words, per capita saving may be just adequate to finance outpatient care needs of the women in rural Karnataka.

Initial apprehension was that the women might save an amount adequate enough to grab the financial incentive (matching grant) of US\$ 2 per month. However, average monthly saving of a woman was US\$ 0.86 or 47.5% of the matching grant; only 43.7% of the matched grant was actually used. On the other hand, average monthly saving of some women was about US\$ 4 or 221% of the marching grant. Therefore, women's savings were not primarily driven by the financial incentive. SHG experience in Karnataka has shown that women saved more with experience.

However, the same level of saving may not be achievable without the financial incentive and a close monitoring of the saving, health care and financing. It is difficult to speculate about the resource generation potential of *medisave* although it may be safe to say that a per capita saving of about US\$ 5 -10 per annum is achievable in the rural Indian context. Given that Karnataka's per capita health spending is lower than the Indian average, the achievable amount may be slightly higher in other Indian states with higher per capita health spending.

### 6.3.7.1 Lesson

Under certain conditions, domestic savings could generate sufficient resources for financing health care, particularly outpatient care, in some rural contexts.

Financial incentive in the form of a matching sum may not boost the amount saved beyond a point. However, it is possible to generate full-proof financial incentive if it is routed through a well-developed formal transfer mechanism; in our case, it was a bank.

### 6.3.8 Health care seeking

One major effort as part of the experiment was to link the rural women with qualified health care practitioners. The use of less-than-fully qualified (LTFQ) practitioners was so high that it was even difficult to find qualified physicians in some villages. The population survey sought the women's preferred choice of health care providers in the area and they were asked to list three. In many cases, all the three providers happened to be the LTFQs. In this experiment, at least 61.2% of the health care was provided

by qualified physicians indicating that the proportion relying on the LTFQs might have come down. Many women stated that they went to qualified physicians for the first time and some pregnant women mentioned that they had completed full course of antenatal care mainly due to *medisave*. Deliveries, which otherwise would have occurred at home, were attended by qualified gynaecologists in well-equipped institutions. Of course, this was facilitated by health insurance, not *medisave*. The flip side, however, is that 44.4% of the illness episodes were left untreated either because they were non-serious or were ‘treated’ at home. Similarly, 38.8% of episodes received treatment from other sources due to their suddenness, and availability of ‘close’ substitutes.

Some women used the formal health care system for the first time and demonstrated to other comparable women that quality health care, including delivery care, was affordable. *Medisave* also helped to institutionalize some deliveries, which otherwise would have occurred at home. Less than fully qualified providers were still a source of outpatient care for minor ailments due to their proximity to the local population, low fee and flexible timing. But, overall, health care seeking in general and health care seeking from qualified physicians improved, some women sought antenatal care from a qualified physician for the first time.

#### 6.3.8.1 Lesson

It is possible to create conditions to enable the rural women to access formal health care, where it exists.

#### 6.3.9 Resource utilization

Resource utilization was less than 7% of the total available resources and 13.2% of the total saving. Low resource utilization was partly due to the time gap between the saving and resource requirement. Another reason was that over one-third of the women did not require treatment as they were healthy. Only concern was about 40% of the women who were affected by some illnesses, but did not use *medisave* resources. Of course, it was not possible to verify how many of them really required treatment.

An *a priori* concern was that women might treat this experiment purely as a saving model and therefore, might not use the saving for health care. This was proved wrong in the end because 61.2% of treated episodes were financed by *medisave*.

Another apprehension was that the women might indulge in fraudulent practices by using the resources for men and others. Although about 80% of the women were very poor, no dispute concerning misappropriation of money was reported from any one of the 27 villages. Moreover, the design was such that it was not possible to misuse the resources. The physician in the community advisory board was in a position to verify any misappropriation. But, she/he was not required to do because there was no such incident.

#### 6.3.9.1 Lesson

Due to relatively low cost of formal health care in rural areas, resource requirement may be kept low, if the resources are prepaid. In this case, saving was used a prepayment mechanism. Additional cost in the form of high-interest loans is reduced.

Resource saving and spending follow different time and cyclical trend. Since the average age of the enrollees was 37 years, they probably were in the saving side of the life cycle.

*Medisave*, if collectively organized, could be used as a collective bargaining tool to reduce the consultation fee and medicine prices.

### 6.3.10 *Medisave* as a prepayment option to streamline OOPs

One of the main objectives of the experiment was to streamline, if not reduce, the household out-of-pocket spending. As stated earlier, *medisave* apparently served as a prepayment option for financing outpatient care and women's own saving alone helped to streamline OOPs to the extent of 72.3%. It also brought additional resources into health because saving plus incentive exceeded the state per capita OOPs by 41.6%. Considering low per capita rural health spending, especially by the women, and the fact that the saving was meant for only outpatient care, the real increase would have been still higher.

A significant contribution of *medisave* was felt in the purchase of medicines. In this experiment, as part of the design, physicians were required to have an agreement with pharmacists for a reduced margin as well as delayed payment of medical bills. This really helped because medicines consumed the highest share (77.6%) of *medisave* resources.

While the saving potential was demonstrated through *medisave*, women still incurred some OOPs to the extent of 38.8%. In other words, OOPs can not be totally eradicated even through a close experiment such as this. Some level of OOPs will still persist due to various reasons. Moreover, streamlining of OOPs through banks requires wide existence of banks and their willingness to 'tolerate' the slow saving process involving numerous small non-periodic increments of savings from the rural women and very small amount of funds collected.

#### 6.3.10.1 Lesson

Under certain conditions and with appropriate incentives, *medisave* could be a prepayment mechanism for streamlining OOPs. However, in the short run, it cannot generate adequate resources to meet catastrophic expenditures. Also, it cannot eradicate OOPs completely.

Medicines, particularly used in the outpatient setting, are generally not reimbursed even by health insurance. *Medisave* could be an appropriate funding mechanism to finance medicines, even in rural and outpatient care settings.

### 6.3.11 Ethical issues concerning banking and health care

Replication of this model requires cooperation and support from banks and health care providers. In some settings, it is possible to commit fraud in banking and provision of health care. Small depositors may not be respected and it might discourage them from using the bank. Also, if the banking process is too time consuming, rural people relying heavily on subsistence wage may not be interested in banking. Similarly, good physician behaviour is crucial for the success of this kind of experiment. In this experiment,

they were required to wait for a month to receive the payment due to them even though the fee itself was below the market rate. Our physicians were extremely cooperative and supportive so that the entire affair was very smooth. The same may not exist in other resource-poor settings.

### 6.3.11.1 Lesson

Working of this model requires a fair partnership between various stakeholders. In this experiment, it was mediated by an academic institution. Similar mediation may be required to make a cost-effective and equitable model of health care financing.

### 6.3.12 Health insurance as a complementary option

The initial understanding was that health insurance would play a major part. In fact, health insurance was used as a door opener in the case of some women to attract them towards *medisave* experiment. In the end, experience with health insurance was bitter for many women who wanted to avail health care using health insurance. As poor women, they had some unmet health care needs, which they wanted to address through health insurance. But, health insurance rules did not permit them to avail. Women simply could not comprehend the term such as 'pre-existing illness'. Even delivery was treated as pre-existing when the woman was pregnant at the time of enrolment. This is perfectly fine from an insurance point of view, but was difficult to explain to the rural women. As a result, many women even demanded the premium back. From the initial position of door opener, health insurance slipped to an unwanted element.

### 6.3.12.1 Lesson

Some insurance terminologies such as the pre-existing conditions, solidarity and pooling are not understood by rural people. In certain contexts, people may prefer mechanisms that pay the money back when not used. *Medisave* was seen as one such mechanism.

### 6.3.13 Sustainability of *medisave* in the rural context

Average monthly saving per woman was US\$ 0.86. It was comparable with average monthly saving (US\$ 4.38) of a self-help group (SHG) member in Karnataka for multiple purposes;<sup>45</sup> SHG members' saving for health could be estimated as US\$ 0.22 or 5% of their total saving. The financial incentive offered as part of *medisave* might have boosted the saving by some percentage. Hence, saving for health created by this experiment is sustainable, which can be gauged from the fact that about 80% of the enrolled women continued to save even months after the withdrawal of the financial incentive. In fact, a saving culture was created among the rural women including non-enrollees from the same and other villages. SHG experience has shown that women saved more with experience.

While the amount of saving and the utterances of women indicate that the model is sustainable, this tight model may not be practicable if we want to scale it up at the state or national level. It requires some fine-tuning before it can be scaled up. Our observation is that women may continue with *medisave*, but not health insurance, which can be gauged from the fact that over 25% of enrolled women are still (April 2009) actively maintaining their accounts with live deposits and an overall current balance of

over US\$ 25. Remember, these are the women, who were never engaged in a formal banking business and the matching sum was withdrawn from May 2007. Others too continued with their accounts although not making periodic deposits. This is the status after a period of over 2 years from the date of withdrawal of the financial incentive. The empowerment approach applied by the experiment, its strongest point, really enhanced the likelihood of its continuance by these rural women. Even after more than one year of the withdrawal of the financial incentive, a vast majority of women are still continuing with their bank accounts.

### **6.3.13.1 Lesson**

Sustainability of a mechanism such as this requires certain pre-conditions. In this case, self-help approach already existed in the rural community. Also, rural banking is well developed in India. Where banks don't exist, post offices may be used as 'fund holders'.

## 7. REFERENCES

1. Carrin, G., James, C., & Evans, D. (2005). *Achieving universal health coverage: developing the health financing system*. Geneva: World Health Organization, Department of Health Systems Financing, Health Financing Policy, Technical Briefs for Policy Makers No. 1. [http://www.who.int/health\\_financing/documents/pb\\_e\\_05\\_1-universal\\_coverage.pdf](http://www.who.int/health_financing/documents/pb_e_05_1-universal_coverage.pdf)
2. WHO. (2009). *Women and health: today's evidence tomorrow's agenda*. Geneva: World Health Organization.
3. Richard, F., Witter, S., Brouwere, V., D. (ed.) (2008). *Reducing financial barriers to obstetric care in low-income countries*. Antwerp: ITG Press, Studies in Health Services Organization & Policy.
4. Hutton, G. 2006. *The effect of maternal–newborn ill-health on households: economic vulnerability and social implications*. Geneva: World Health Organization, Moving towards universal coverage: Issues in maternal-newborn health and poverty. [http://whqlibdoc.who.int/publications/2006/9241594489\\_eng.pdf](http://whqlibdoc.who.int/publications/2006/9241594489_eng.pdf)
5. Mishra, M. (2006) *Gendered vulnerabilities: women's health and access to health care in India*. Mumbai: Centre for Enquiry into Health and Allied Themes (CEHAT).
6. WHO. (2005). *The World Health Report 2005: Make every mother and child count*. Geneva: World Health Organization.
7. Ensor, T., Ronoh, J. 2005. Effective financing of maternal health services: a review of the literature. *Health Policy*; **75**: 49-58.
8. Public Health Resource Network. (2005). *Mainstreaming women's health*. Raipur (Chattisgarh): Public Health Resource Network, Book No. 5.
9. WHO. (2007). *Maternal mortality in 2005: estimates developed by WHO, UNICEF, UNFPA and the World Bank*. Geneva: World Health Organization.
10. Government of India. (2008). National Health Profile (NHP) of India - 2008. New Delhi: Ministry of Health and Family Welfare, Central Bureau of Health Intelligence. <http://www.cbhidghs.nic.in/writereaddata/mainlinkFile/Health%20Status%20Indicators.pdf>
11. Government of India. (2005). Report of the National Commission on Macroeconomics and Health. New Delhi: Ministry of Health and Family Welfare, National Commission on Macroeconomics and Health. [http://mohfw.nic.in/reports/reports/Report\\_on\\_NCMH/ReportoftheNationalCommission.pdf](http://mohfw.nic.in/reports/reports/Report_on_NCMH/ReportoftheNationalCommission.pdf)
12. IIPS, & Macro International. (2007). *National Family Health Survey (NFHS-3), 2005-06: India - Volume-1*. Mumbai: International Institute for Population Sciences.
13. WHO. (2008). *World Health Report 2008: Primary Health Care - Now more than ever*. Geneva: World Health Organization.
14. WHO. (2008). *Closing the gap in a generation; health equity through action on the social determinants of health*. Geneva: World Health Organization, Report of the Commission on Social Determinants of Health.

15. Levesque, J. F., Haddad, S., Narayana, D., Fournier, P. Affording what is free and paying for choice: comparing the cost of public and private hospitalizations in urban Kerala. *International Journal of Health Planning and Management*, **22(2)**: 159-174.
16. McIntyre, D., Thiede, M., Dahlgren, G., & Whitehead, M. (2006). What are the economic consequences for households of illness and of paying for health care in low- and middle-income contexts? *Social Science & Medicine*; **62(4)**: 858-865.
17. Falkingham, J. (2004). Poverty, out-of-pocket payments and access to health care: evidence from Tajikistan. *Social Science & Medicine*, **58(2)**: 247-258.
18. Pannarunothai, A., Mills, A. (1997). The poor pay more: Health-related inequity in Thailand. *Social Science & Medicine*, **44(12)**: 1781-1790.
19. Xu, K., Evans, D.B., Carrin, G., Agullar-Rivera, A.M., Musgrove, P., Evans, T. (2007). Protecting households from catastrophic health spending. *Health Affairs*, **26(4)**, 972-83.
20. WHO (2009). *World Health Statistics 2009*. Geneva: World Health Organization.
21. McIntyre, D. (2007). *Learning from experience: Health care financing in low- and middle-income countries*. Geneva: Global Forum for Health Research. [http://www.globalforumhealth.org/filesupld/hcf/HCF\\_full\\_text.pdf](http://www.globalforumhealth.org/filesupld/hcf/HCF_full_text.pdf)
22. Varatharajan, D. (2007). *Enhancing equity in access to health care in Asia-Pacific region: potentially remediable inequities and strategies to overcome them*. Bangkok: UNFPA, UN Thematic Working Group (Health).
23. Dummer, T., J., B., Cook, I., G. (2007). Exploring China's rural health crises: Processes and policy implications. *Health Policy*; **83**: 1-16.
24. Annear, P., L., Wilkinson, D., Chean, M., R., & Pelt, M., V. (2006). *Study of financial access to health services for the poor in Cambodia*. Phnom Penh: MoH, WHO, AusAID, and RMIT University. [http://www.who.int/health\\_financing/countries/cam-healthaccess.pdf](http://www.who.int/health_financing/countries/cam-healthaccess.pdf)
25. van Doorslaer, E., O'Donnell, O., Rannan-Eliya, R. P., Somanathan, A., Adhikari, S. R., Garg, C. C., et al. (2006). Effect of payments for health care on poverty estimates in 11 countries in Asia: an analysis of household survey data. *The Lancet*; **368(9544)**: 1357-1364.
26. van Doorslaer, E., O'Donnell, O., Rannan-Eliya, R. P., Somanathan, A., et al. (2005). Paying out-of-pocket for health care in Asia: Catastrophic and poverty impact. Rotterdam: Erasmus University, EQUITAP Project, Working paper no. 2. <http://www.equitap.org/publications/wps/EquitapWP2.pdf>
27. Xu, K., James, C., Carrin, G., Muchiri, S. (2006). *An empirical model of access to health care, health care expenditure and impoverishment in Kenya: learning from past reforms and lessons for the future*. Geneva: WHO, Department of Health Systems Financing, Health Financing Policy, Discussion paper no. 3. [http://www.who.int/health\\_financing/documents/dp\\_e\\_06\\_3-access\\_kenya.pdf](http://www.who.int/health_financing/documents/dp_e_06_3-access_kenya.pdf)
28. Xu, K., Evans, D., B., Kawabata, K., Zeramdini, R., Klavus, J., Murray, C., J., L. (2003). Household catastrophic health expenditure: a multi-country analysis. *The Lancet*; **362 (9378)**: 111-117.

29. Galbraith, A., Wong, S. T., Kim, S., E., Newacheck, P., W. (2005). Out-of-Pocket Financial Burden for Low-Income Families with Children: Socioeconomic Disparities and Effects of Insurance. *BMC Health Services Research*, 40(6): 1722-1736.
30. Parkhurst, J., O., Rahman, S., A. (2005) *Access to and utilization of professional child delivery services in Uganda and Bangladesh - Bangladesh Country Report*. London: London School of Hygiene and Tropical Medicine, Health Systems Development Programme, HSD working paper HSD/WP/07/05.
31. UN. (2008). *Millennium Development Goals 8: Delivering on the global partnership for achieving the Millennium Development Goals*. New York: United Nations, MDG Gap Task Force Report 2008.
32. Chaudhuri, A., & Roy, K. (2008). Changes in out-of-pocket payments for healthcare in Vietnam and its impact on equity in payments, 1992–2002. *Health Policy*, **88(1)**, 38-48.
33. Siskou, O., Kaitelidou, D., Papakonstantinou, V., Liaropoulos, L. (2008). Private health expenditure in the Greek health care system: Where truth ends and the myth begins. *Health Policy*, **88(2-3)**: 282-293.
34. Jeong, H. S. (2005). Health care reform and change in public–private mix of financing: a Korean case. *Health Policy*, **74(2)**: 133-145.
35. Nandakumar, A., K., Chawla, M., & Khan, M. (2000). Utilization of Outpatient Care in Egypt and its Implications for the Role of Government in Health Care Provision. *World Development*, **28(1)**: 187-196.
36. Bergström, G., & Karlberg, I. (2007). Decentralized responsibility for costs of outpatient prescription pharmaceuticals in Sweden: Assessment of models for decentralized financing of subsidies from a management perspective. *Health Policy*, **81(2-3)**: 358-367.
37. Houg, D., B., Bales, S., Phuong, N., K., Jiaying, C., Segall, M., & Lucas, H. (2006). *Ensuring health care for the rural poor in Vietnam and China: a state or a market approach?* Hanoi: Medical Publishing House.
38. Government of Kenya. (2004). *A survey of medicine prices in Kenya - 2004*. Nairobi: Republic of Kenya, Ministry of Health, World Health Organization and Health Action International Africa.
39. Government of India. (2005). Financing and delivery of health care services in India. New Delhi: Ministry of Health and Family Welfare, Background papers of the National Commission on Macroeconomics and Health. [http://mohfw.nic.in/reports/reports/Report\\_on\\_NCMH/BackgroundPapersreport.pdf](http://mohfw.nic.in/reports/reports/Report_on_NCMH/BackgroundPapersreport.pdf)
40. WHO (2009). *National Health Accounts - Ratios and per capita levels*. Geneva: World Health Organization, Country information. <http://www.who.int/nha/country/en/index.html>
41. Government of India. (2008). *Economic Survey 2007-08*. New Delhi: Ministry of Finance, <http://indiabudget.nic.in/es2007-08/chapt2008/chap106.pdf>
42. Government of India. (2007). *NRHM - Common Review Mission*. New Delhi: National Rural Health Mission, Ministry of Health and Family Welfare.



43. Government of India. (2008). *National Urban Health Mission (2008-12)*. New Delhi; Ministry of Health and Family Welfare.
44. Government of India. (2005). *National Rural Health Mission (2005-12)*. New Delhi: Ministry of Health and Family Welfare.
45. Government of India. (2002). *National Health Policy 2002*. New Delhi: Ministry of Health and Family Welfare.
46. IRDA. (2008). *Handbook on Indian insurance statistics 2007-08*. Hyderabad: Insurance Regulatory and Development Authority.
47. Press Information Bureau. 2009. *Health Insurance for Government Employees*. New Delhi: Government of India, Ministry of Health and Family Welfare, Press release dated 10<sup>th</sup> July 2009. <http://pib.nic.in/release/release.asp?relid=50137>
48. Government of India. (2009). *Swasthya Bima Yojana*. New Delhi: Ministry of Labour and Employment. <http://labour.nic.in/ss/SwasthyaBimaYojana.pdf>
49. Government of India. (2008). *RSBY process 2009-10*. New Delhi: Ministry of Labour and Employment.
50. RSBY. (2009). *About RSBY*. New Delhi: Government of India. The Ministry of Labour and Employment [http://www.rsby.in/about\\_rsby.html](http://www.rsby.in/about_rsby.html)
51. Jain, N. (2009). *Rashtriya Swasthya Bima Yojna – Story So Far... Experience and Learning*. New Delhi: Government of India. The Ministry of Labour and Employment 10<sup>th</sup> January.
52. Katre, V. (2009). *Rashtriya Swasthya Bima Yojana*. Gandhi Nagar (Gujarat): Government of Gujarat, Department of Health & Family Welfare.
53. UN. (1998). *Fiftieth anniversary of the universal declaration of human rights 1948-1998*. New York: United Nations <http://www.un.org/Overview/rights.html>
54. Government of India. (2006). *Bulletin on rural health statistics in India 2006; Special revised edition*. New Delhi: Government of India, Ministry of Health & Family Welfare. <http://mohfw.nic.in/dofw%20website/Bulletin%20on%20RHS%20-%20March,%202006%20-%20PDF/Tables/Table12.pdf>
55. Government of India. (2001). *Census data 2001: projected population by sex*. New Delhi: Office of the Registrar General and Census Commissioner. <http://www.censusindia.gov.in/>
56. Government of Karnataka. (2006). *Karnataka Human Development Report 2005*. Bangalore: Government of Karnataka. <http://planning.kar.nic.in/khdr2005/eindex.htm>
57. Government of India. (2007). *Family welfare statistics in India - 2006*. New Delhi: Ministry of Health and Family Welfare. <http://mohfw.nic.in/dofw%20website/FWSII%20-%202006/Book.pdf>
58. Robinson, M. S. (2001). *The Micro Finance Revolution: Sustainable finance for the poor*. Washington DC: The World Bank.
59. Wagstaff, A. (2002). Poverty and health sector inequalities. *Bulletin of the World Health Organization*, **80(2)**: 1-19.

60. Ahlin, C., & Jiang, N. (2008). Can micro-credit bring development? *Journal of Development Economics*; 86(1): 1-21.
61. Microcredit Summit Campaign. (2007). *State of the microcredit summit campaign report 2007*. Washington DC: The Microcredit Summit Campaign. <http://www.microcreditsummit.org/pubs/reports/socr/EngSOCR2007.pdf>
62. CGAP. (2007). *About microfinance: What is the relationship between microfinance and the Millennium Development Goals?* Washington DC: The Consultative Group to Assist the Poor.
63. UNFPA. (2006). *From microfinance to macro change: integrating health education and microfinance to empower women and reduce poverty*. New York: United Nations Population Fund, Microcredit Summit Campaign. [http://www.unfpa.org/upload/lib\\_pub\\_file/530\\_filename\\_advocacy.pdf](http://www.unfpa.org/upload/lib_pub_file/530_filename_advocacy.pdf)
64. CGAP. (2004). *Financial institutions with a 'double bottom line': implications for the future of microfinance*. Washington DC: The Consultative Group to Assist the Poor, Occasional Paper No. 8.
65. UNICEF Ghana. (2002). Evaluation of HIV/AIDS prevention through peer education, counselling, health care, training and urban refugees in Ghana. *Evaluation and Program Planning*; 25: 409-20.
66. Bhuiya, A., & Chowdhury, M. (2002). Beneficial effects of a women-focused development programme on child survival: evidence from rural Bangladesh. *Social Science & Medicine*; 55(9): 1553-60.
67. Hadi A. (2002). Integrating prevention of acute respiratory infections with micro-credit programme: experience of BRAC, Bangladesh. *Public Health*; 116: 238-44.
68. Amin, R., St. Pierre, M., Ahmed, A., & Haq, R. (2001). Integration of an essential services packages (ESP) in child and reproductive health and family planning with a micro-credit program for poor women: evidence from a pilot project in rural Bangladesh. *World Development*; 29(9): 1611-21.
69. Sen, A. (1999). Women's Agency and Social Change. In: *Development as Freedom*. Oxford: Oxford University Press.
70. Jaya, S. (2002). Self Help Groups in empowering women: case study of selected SHGs and NHGs. Thiruvananthapuram: Centre for Development Studies, KRPLLD, Discussion Paper No. 38.
71. Strobach, T., & Zaumseil, M. (2007). An evaluation of a micro-credit system to promote health knowledge among poor women in Bangladesh. *Health Promotion International* 2007; 22(2): 129-36.
72. Saji, S., G. (2007). *Share of health in micro financing: An analysis of credit disbursements by Self-Help Groups (SHGs) in Kerala*. Thiruvananthapuram: University of Kerala, Unpublished M. Phil. dissertation.

73. Dohn, A. L., Chavez, A., Dohn, M. N., Saturria, L., & Pimentel, C. (2004). Changes in health indicators related to health promotion and microcredit programs in the Dominican Republic. *Pan American Journal of Public Health*; **15(3)**: 185-93.
74. Odutolu, O., Adedimeji, A., Odutolu, O., Baruwa, O., & Olatidoye, F. (2003). Economic empowerment and reproductive behaviour of young women in Osun state, Nigeria. *African Journal of Reproductive Health*; **7(3)**: 92-100.
75. Preker, A., S., Carrin, G., Dror, D., Jakab, M., Hsiao, W., Arhin-Tenkorang, D. (2002). Effectiveness of Community health financing in meeting the cost of illness. *Bulletin of the World Health Organization*; **80**: 143-150.
76. Microcredit Summit Campaign. (2000). Press information: microcredit helps ease the burden of AIDS in Africa. Washington DC: The Microcredit Summit Campaign. <http://www.microcreditsummit.org/press/AIDS.htm>
77. Rolfe, B., Leshabari, S., Rutta, F., Murray, S. F. (2008). The crisis in human resources for health care and the potential of a 'retired' workforce: case study of the independent midwifery sector in Tanzania. *Health Policy Planning*; **23(2)**:137-49.
78. Chuma, J., Gilson, L., & Molyneux, C. (2007). Treatment-seeking behaviour, cost burdens and coping strategies among rural and urban households in Coastal Kenya: an equity analysis. *Tropical Medicine & International Health*; **12(5)**: 673-86
79. UNESCO. (1996). *Development Aid For You, Ethiopia*. Addis Ababa: United Nations Educational, Scientific and Cultural Organization (UNESCO), Management of Social Transformation (MOST) Programme, MOST Clearing House, Best Practices. <http://www.unesco.org/most/africa2.htm>
80. Mohindra, K., S., Haddad, S., & Narayana, D. (2008). Can microcredit help improve the health of poor women? Some findings from a cross-sectional study in Kerala, India. *International Journal for Equity in Health*; **7(2)**. <http://www.equityhealthj.com/content/pdf/1475-9276-7-2.pdf>
81. Aga Khan Agency for Microfinance. (2007). *Annual Report 2006*. Geneva: Aga Khan Agency for Microfinance. [http://www.akdn.org/microfinance/downloads/AKAM\\_2006.pdf](http://www.akdn.org/microfinance/downloads/AKAM_2006.pdf)
82. Nayar, K., R., Cathareine, K., & Oliver, R. (2004). Self-help: What future role in health care for low and middle- income countries? *International journal for Equity in Health*, **3(1)**: 1-10.
83. Gine, X., Karlan, D., S. (2007). *Group versus individual liability: A field experiment in the Philippines*. Washington DC: The World Bank. <http://aida.econ.yale.edu/karlan/papers/GroupversusIndividualLiability.pdf>
84. Pia, S. (2004). Why should the poor insure? Theories of decision-making in the context of health insurance. *Health Policy and Planning*, **19(6)**: 349-355.
85. World Bank. (2008). *Finance for all? Policies and pitfalls in expanding access*. Washington DC: The World Bank, Policy Research Report No. 41792.
86. Guirkingner, C. (2008). Understanding the coexistence of formal and informal credit markets in Piura, Peru. *World Development*; **36(8)**: 1436-1452.

87. Byström, H. N. E. (2008). The microfinance collateralized debt obligation: a modern Robin Hood? *World Development*, **38(11)**: 2109-2126.
88. Tsai, K. S. (2004). Imperfect substitutes: the local political economy of informal finance and microfinance in rural China and India. *World Development*, **32(9)**: 1487-1507.
89. Chia, N., C., & Tsui, A., K., C. (2005). Medical savings accounts in Singapore: how much is adequate? *Journal of Health Economics*, **24(5)**: 855-75.
90. Deber, R., B., Forget, E., L., & Roos, L., L. (2004). Medical savings accounts in a universal system: wishful thinking meets evidence. *Health Policy*; **70(1)**: 49-66.
91. Von, E., W., Massaro, T., Voo, Y., O., Ziegenbein, R. (2002). Medical savings accounts: a core feature of Singapore's health care system. *European Journal of Health Economics*, **3(3)**: 188-95.
92. Liu, Y. (2002). Reforming China's urban health insurance system. *Health Policy*, **60(2)**: 133-50.
93. Hong, P. K. (2001). The savings approach to financing long-term care in Singapore. *Journal of Ageing Society Policy*, **13(2-3)**: 169-83.
94. Crowell, D., W. (2003). *The SEWA Movement and Rural Development: The Banashkantha and Kutch Experience*. New Delhi: Sage publications.
95. Pauly, M., Percy, A., Bradley, H., Jerry, R. (2000). What would happen if large firms offered MSAs. *Health Affairs*, **19(3)**: 165-172.
96. Dua, A., Smith, B. (1998). Community-financing in developing countries: the potential for the health sector. *Health Policy and Planning*, **3(2)**, 95-101.
97. NABARD. (1999). *Task Force on supportive policy and regulatory framework for microfinance-A report*. Mumbai: National Bank for Agriculture and Rural Development.
98. Murdoch, J. (1999). The Microfinance Promise. *The Journal of Economic Literature*, **37(4)**: 1569-1614.
99. NABARD. (1995). *Linking Self Help Groups with banks: An Indian experience*. Mumbai: National Bank for Agriculture and Rural Development
100. Khandkar, R. (1998). Micro credit programme evaluation – A critical review. *IDS Bulletin*, **129(4)**.
101. Government of Kerala. (2000). *Economic Review 1999*. Thiruvanthapuram: State Planning Board.
102. Gumber, A. (2000). Health Care Burden on Households in the Informal Sector. *WHO Regional Health Forum*, **4 (1&2)**: 26-29.
103. Duggal, R (2001), Health sector financing in the context of women's health. In: Mukhopadhyay, S. (ed). *Women's Health, Public Policy and Community Action*. Mumbai: ISST Manohar, 37-50.

104. CHIN. (2006). New health insurance schemes in India. *Community Health Insurance Network (CHIN) Newsletter*, 2(1), January 2006. <http://www.comhealthins.org/newsletters/CHIN%20newsletter%20Jan%202006.pdf>
105. Devadasan, N., Ranson, L., van Damme, W., Criel, B. (2004). Community health insurance in India: an overview. *Economic and Political Weekly*. July 10, 3179-318.
106. Hanvoravongchai, P. (2002). *Medical Savings Accounts: Lessons learned from limited international experience*. Geneva: WHO, Department of Health Systems Financing, Health Financing Policy, Discussion paper no. 3. [http://www.who.int/health\\_financing/documents/dp\\_e\\_02\\_3-med\\_savings\\_accounts.pdf](http://www.who.int/health_financing/documents/dp_e_02_3-med_savings_accounts.pdf)
107. Ahuja, R. (2004). *Health insurance for the poor in India*. New Delhi: Indian Council for Research on International Economic Relations, Working Paper No. 123.
108. Mathiyazhagan, K. (1998). Willingness to pay for rural health insurance through community participation in India. *International Journal of Health Planning and Management*, **13(1)**: 47-67.
109. Geneau, R., Massae, P., Courtright, P., Lewallen, S. (2008). Using qualitative methods to understand the determinants of patients' willingness to pay for cataract surgery: A study in Tanzania. *Social Science & Medicine*, **66(3)**: 558-568.
110. Diener, A., O'Brien, B., & Gafni, A. (1998). Health care contingent valuation studies: A review and classification of the literature. *Health Economics*, **7**, 313-326.
111. Dong, H., Kouyate, B., Cairns, J., & Sauerborn, R. (2003). A comparison of the reliability of the take-it-or-leave-it and the bidding game approaches to estimating willingness-to-pay in a rural population in West Africa. *Social Science & Medicine*, **56(10)**: 2181-2189.
112. Borghi, J., Shrestha, D., L., Shrestha, D., & Jan, S. (2007). Using focus groups to develop contingent valuation scenarios - A case study of women's groups in rural Nepal. *Social Science & Medicine*, **64(3)**, 531-542.
113. Whynes, D., K., & Sach, T., H. (2007). WTP and WTA: Do people think differently? *Social Science & Medicine*, **65(5)**, 946-957.
114. Donaldson, C. (2001). Eliciting patients' values by use of 'willingness to pay': Letting the theory drive the method. *Health Expectations*, **4**, 180-188.
115. Smith, R., D. (2004). The reliability of willingness to pay for changes in health status. *Applied Health Economics & Health Policy*, **3(1)**: 35-38.
116. Government of Kenya. (2005). *National health sector strategy plan II (2005-2010)*. Nairobi: Government of the Republic of Kenya, Ministry of Health, Health sector reform Secretariat. <http://www.hsrs.health.go.ke/publications.htm>
117. Xu, K., Evans, D., B., Kadama, P., Nabyonga, J., Ogwal, P., O., Aguilar, A., M. (2005). *The elimination of user fee in Uganda: impact on utilization and catastrophic health expenditures*. Geneva: WHO, Department of Health Systems Financing, Health Financing Policy, Discussion paper no. 4. [http://www.who.int/health\\_financing/documents/dp\\_e\\_05\\_4-user\\_fee\\_elimination\\_uganda.pdf](http://www.who.int/health_financing/documents/dp_e_05_4-user_fee_elimination_uganda.pdf)

118. Government of Bangladesh. (2000). Health policy of Bangladesh. Dhaka: Government of People's Republic of Bangladesh, Ministry of Health and Family Welfare. [http://www.mohfw.gov.bd/health\\_policy.htm](http://www.mohfw.gov.bd/health_policy.htm)
119. O'Donnell, O., van Doorslaer, E., Rannan-Eliya, R., P., Somanathan, A., et al. (2005). *Who pays for health care in Asia?* Thessaloniki, Greece: University of Macedonia, EQUITAP Project, Working paper no.1. <http://www.equitap.org/publications/wps/EquitapWP1.pdf>
120. Gumber, A. (2002). *Health insurance for the informal sector: Problems and prospects*. New Delhi: Indian Council for Research on International Economic Relations, Working Paper No. 90.
121. Government of India. (2001). *Census of India - 2001*. New Delhi: Office of the Registrar General and Census Commissioner. <http://www.censusindia.gov.in/>
122. Mathiyazhagan, M. K. (2003). People's choice of health care provider: policy options for rural Karnataka in India. *Journal of Health Management*, 110-135.

## Annex-1: Survey instruments

Household No:

Project on

**Banking for better health: Medisave for rural women in Karnataka, India<sup>1</sup>**

**Community survey of women**

### HOUSEHOLD QUESTIONNAIRE

**1. Full Address (with tel. no.)**

**2. Details of household members**

Name	Sex	Age	Years of schooling	7.1 Occupation	Monthly income (Rs.)	Bank A/C (Yes/No)

**3. Community** (1) Forward (2) Backward (3) Most backward (4) SC/ST

**4. Status of poverty** (1) APL (2) BPL (3) BPL but no BPL card

**5. How long (years) you have been staying in this house?**

**6. Did you live in a city/town for more than 6 months during the last 5 years?**

(1) Yes (2) No

**7. Type of house**

(1) Concrete wall & roof (2) Concrete wall & tiled roof (3) Mud wall & tiled roof  
(4) Mud wall & thatched roof (5) Houseless

**8. No. of rooms in the house:**\_\_\_\_\_

**9. Separate cooking area** (1) Yes (2) No

**10. Own/rented house** (1) Own (2) Rented (3) Leased

**11. Use of toilet**

- (1) Flush toilet within house (2) Public/Shared flush toilet  
(3) Pit toilet within house (4) Public/Shared pit toilet (5) Use open field

**12. Source of drinking water**

- (1) Own piped water (2) Piped water from outside (3) Hand pump  
(4) Own well (5) Public well (6) River/canal/pond

**13. Cooking fuel**

- (1) Cooking gas (2) Electricity (3) Biogas (4) Fire wood (5) Others (specify)

**14. Is the house electrified?** (1) Yes (2) No

**15. Water purification method**

- (1) Electric purifier (2) Boiling (3) Water filter (4) Filter using cloth (5) No purification

**16. Size of land holding**

- (1) > 5 acres (2) 1 – 5 acres (3) No agricultural land but > 5 housing plots  
(4) No agri. Land but 1 – 5 housing plot (5) No land at all

**17. Livestock** (1) Yes (2) No



**INDIVIDUAL QUESTIONNAIRE***Individual No:***Name of the woman:****Age:****Informed Consent**

Researchers from Sree Chitra Tirunal Institute for Medical Sciences and Technology, Thiruvananthapuram, and Vijaya Bank, Bangalore have undertaken a research project on 'Banking for better health'. The project aims to establish bank accounts for women from backward and rural areas of Dharwad, Haveri and Madhya districts of Karnataka. This survey is to collect certain basic information from women in this area to be used for research purpose and for the purpose of enrolling women in the project. The information/data thus generated would be kept confidential and would be used only for the purpose of research. Some of the survey participants, who express their willingness to join, have the benefit of being enrolled in the 'Medisave programme' to be started as part of the project. Your participation in this survey is voluntary and you can withdraw your consent and from the study at any point of time without facing any penalty. If you have any questions and concerns about this survey, please contact Ms. Jayalaxmi, President, Paripoorna Grameena Abhivruddi Mahila Seva Samsthe, Dharwad.

**- Dr. D. Varatharajan and Dr. Murali Kannan**  
Project Investigators

The project purpose was explained to me and I am willing to participate in the project.

**Signature of the woman/Eye witness:****Date:****PERSONAL DETAILS**

- 1. Marital status** (1) Married (2) Widowed (3) Never married (4) Separated/divorced/deserted
- 2. Mother Tongue:** **Can you read and write?** (1) Yes (2) No
- 3. How often do you read newspaper/magazine?** (1) Daily (2) Once a week  
(3) Once a month (4) Very rarely (5) Don't read (6) Can't read
- 4. Access to television (TV)** (1) Own television at home (2) Television of a neighbour  
(3) Public/panchayat television (4) No access to television
- 5. How often do you watch TV?** (1) Daily (2) Once a week (3) Once a month  
(4) Very rarely (5) Don't watch
- 6. How often do you watch news in TV?** (1) Daily (2) Once a week  
(3) Once a month (4) Very rarely (5) Don't watch

**7. How often do you consume the following?**

Food item	Daily	Weekly	Monthly	Rarely	Never
<i>Milk/Curd</i>					
<i>Pulses/beans</i>					
<i>Green leafy vegetables</i>					
<i>Other vegetables</i>					
<i>Fruits</i>					
<i>Eggs</i>					
<i>Chicken/meat/fish</i>					

**8. Who takes the decision to obtain health care for yourself?**

(1) Myself (2) Husband/father (3) Mother (4) Jointly with husband/parents (5) Others (specify)

**9. Who takes the decision to purchase jewellery or other major household items?**

(1) Myself (2) Husband/father (3) Mother (4) Jointly with husband/parents (5) Others (specify)

**10. Do you need permission to go to the market?** (1) Yes (2) No

**11. Do you need permission to visit relatives?** (1) Yes (2) No

**INCOME AND BANKING**

**12. What is your own monthly income (Rs.)? Source of income:**

**13. Are you allowed to keep money to spend as you wish?** (1) Yes (2) No

**14. Do you have bank accounts in your own name?** (1) Yes (2) No.

**15. If we open a bank account in your name for health care purpose alone and of returning the money back if not used, will you join?** (1) Yes (2) No

**16. If yes, how much will you contribute per month (Rs.)? If no, please state reasons**

**17. If a matching sum is added to your deposit, will you consider increasing the monthly contribution?** (1) Yes (2) No

**18. If yes, how much (Rs.) will you contribute per month (Rs.)? If no, please state reasons.**

**HEALTH CARE SEEKING**

**19. How many times were you ill or required care during the last one year?**

**20. Please give an account of your illness during the last one year**

<b>Illness episode</b>	<b>Most recent</b>	<b>Penultimate</b>	<b>Previous</b>	<b>One before</b>	<b>Previous</b>	<b>One before</b>	<b>Previous</b>
Date of illness							
Nature of illness							
No. of days it lasted							
Treated or not							

**21. If the illness was untreated or treated at home, what was the reason?**

- (1) Not a serious illness      (2) Home remedy is more effective      (3) No money to pay for care  
 (4) No money to pay for transport      (5) No money to pay for accommodation, food etc.  
 (6) None to accompany me      (7) Others (Specify)

**22. If treated, where?**

<b>Provider</b>	<b>Most recent</b>	<b>Penultimate</b>	<b>Previous</b>	<b>One before</b>	<b>Previous</b>	<b>One before</b>	<b>Previous</b>
Government hospital							
PHC							
Private practice Govt. doctor							
Private hospital							
Private clinic							
Private doctor visiting home							
Private pharmacy							
Traditional healer							
ANM/Health worker/ ANM							
Others (specify)							

**23. Distance and cost of treatment & transport**

Distance and cost	Most recent	Penultimate	Previous	One before	Previous	One before	Previous
Provider							
Distance from home (km.)							
Transport cost (Rs.)							
Cost of treatment (Rs.)							
Reason for choosing the provider (use codes)*							

\* Codes for Near 1, Female doctor 2, Free Care 3, Good Care 4, Faith in the provider 5, No other provider 6, Others are too expensive 7, Other (specify) 8.

**24. Have you undergone sterilisation?** (1) Yes (2) No

**25. If yes, where?**

**26. How many times you visited a health facility/camp for yourself for any reason in the last 12 months?**

**27. Which is the nearest health care facility/provider for outpatient care, hospitalisation and delivery?**

Provider	Out patient care	Hospitalisation	Delivery	Family planning	Distance from home (km)
Government hospital					
PHC					
Private practice Govt. doctor					
Private hospital					
Private clinic					
Private doctor visiting home					
Private pharmacy					
Traditional healer					
ANM/Health worker/ANM					
Others (specify)					

**28. Were you pregnant at any point of time?** (1) Yes (2) No

**29. When was your most recent pregnancy (which year?)?**

**30. What was the outcome?**

- (1) Live birth – Male (2) Live birth (Female) (3) Still birth  
 (4) Abortion (5) Miscarriage (6) Not survived

**31. If it was abortion or miscarriage, where was treatment sought?**

- (1) Govt. hospital (2) Private hospital (3) PHC (4) Private clinic  
 (5) Practicing govt. doctor (6) ANM/Health worker (7) Traditional healer (8) Others (specify)  
 (9) Home remedies (10) No treatment

**32. How many times did you receive the antenatal check up during the most recent delivery?**

**33. Total no. of children – born and/or alive**

No. of children				No. of children born in					
Born		Alive		Home		Govt. hospital/centre		Private hospital/clinic	
M	F	M	F	M	F	M	F	M	F

**34. How many months pregnant were you when you received the first antenatal check-up?****35. When you were pregnant, were you given iron folic tablets/syrup? (1) Yes (2) No****36. Where did your husband (if applicable) go for his most recent illnesses?**

Illness	Institution	Public/ private	Distance (km)	Total cost (Rs.)	
				Treatment	Transport
Outpatient care					
Hospitalization					
Emergency					
Family planning					

**37. Provide addresses of the three most preferred health care providers where you would like to seek health care for outpatient care**

Choice	Name of the provider/clinic	Address	Distance from your house (km)
Choice - 1			
Choice - 2			
Choice - 3			

**38. Three most preferred institutions for antenatal care and delivery**

Choice	Name of the hospital	Address	Distance from your house (km)
Choice - 1			
Choice - 2			
Choice - 3			

**39. Three most preferred hospitals for hospitalisation**

Choice	Name of the hospital	Address	Distance from your house (km)
Choice - 1			
Choice - 2			
Choice - 3			

**40. Remarks**

*Individual no.*

**Banking for better health: *Medisave* for rural women in Karnataka, India<sup>r</sup>**

**Community re-survey of women**

**Informed Consent**

Researchers from Sree Chitra Tirunal Institute for Medical Sciences and Technology, Thiruvananthapuram, and Vijaya Bank, Bangalore have undertaken a research project on 'Banking for better health'. It established bank accounts for women in your area. This survey is to know the impact of medisave on women's welfare. The information/data thus generated would be kept confidential and would be used only for research purpose. Your participation in this survey is voluntary and you can withdraw your consent at any point of time without facing any penalty. If you have any questions and concerns about this survey, please contact Sr. Agnes, Sneha Sadana, Byadygi, Ms. Jayalakshmi, Paripoorna Grameena Abhivruddi Mahila Seva Samsthe, Dharward or Ms. Meera Shivalingigh, SB Education Trust, Mandya.

- Dr. D. Varatharajan and Dr. Murali Kannan, Project Investigators

**The survey purpose was explained to me and I am willing to participate in the survey.**

Signature of the woman/Eye witness:

Date:

**Name of the woman:**

**Age:**

**Is she a member?** (a) Yes (b) No

**1. Who takes the decision to obtain health care for yourself?**

(a) Myself (b) Husband/father (c) Mother (c) Jointly with husband/parents

**2. Do you keep money to spend as you wish?** (a) Yes (b) No

**3. How many times were you ill last year?**

**4. How many times did you consult a doctor?**

**5. Who treated the illness?**

(a) Govt. qualified doctor (b) Govt. unqualified staff (c) Private qualified doctor  
(d) Private unqualified doctor (e) Others (specify)

**6. If the illness was untreated or treated at home, what was the reason?**

(a) Not a serious illness (b) Home remedy is more effective (c) No money to pay for care  
(d) No money to pay for transport (e) No money to pay for accommodation, food etc.  
(f) None to accompany me (g) Others (Specify)

<sup>r</sup> A project funded by the Ford Foundation, New Delhi

- 7. If currently pregnant, how many months of pregnancy?**
- 8. How many times did you receive antenatal check up during this pregnancy so far?**
- 9. If delivered a baby during the last year, where was it?**  
(a) Govt. institution            (b) Private institution            (c) Home
- 10. What do you think about the project? In what way is it beneficial to women?**
- 11. Do you think that panchayat should be involved in this project?**    (a) Yes    (b) No
- 12. If yes, in what capacity?**
- 13. If you are a member, how long will you continue the account?**
- 14. If you are not a member, will you consider joining this project?**    (a) Yes    (b) No
- 15. Reason?**
- 16. If you are a member, where will you go for treatment hereafter?**  
(a) The same doctor            (b) Another private qualified doctor  
(c) Unqualified private doctor    (d) Qualified govt. doctor            (e) Unqualified govt. staff
- 17. Remarks**