HEALTH INSURANCE AS SOCIAL INNOVATION FOR FARMERS IN COOPERATIVES: Lessons from Yeshasvini in Karnataka, India

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Introduction

The poor as well as the rich in India tend to use expensive private healthcare providers In India, largely because of inadequate public healthcare. Consequently, the poor spend considerable proportion of their meagre incomes on healthcare leading to deepening of poverty and perpetuation of vulnerability[2]. Considering the above, the Indian government as well as state governments have introduced health insurance schemes to mitigate the adverse effects of ill health among the poor (Rajasekhar *et al* 2012).

Against this background, the Yeshasvini Co-operative Farmers Health Care Scheme[3] (hereafter Yeshasvini) was introduced by the Karnataka State Co-operative Department in 2003. Members of all rural and urban co-operative societies are eligible to enrol themselves in the scheme and the scheme has been extended throughout the state. Currently, 4.15 million[4] farmers are enrolled in Yeshasvini. Enrolment in the scheme is voluntary. Farmers can avail cashless treatment in 725 network hospitals with the help of enrolment card provided by their

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[2] It has been found that health shocks are a major cause of entry into poverty in India (Peters et al. 2002) and other developing countries (Gertler and Gruber 2002; Xu et al. 2003; Krishna 2004). Studies conducted by Anirudh Krishna found that, in parts of India (Rajasthan, Gujarat, and Andhra Pradesh) and Africa (Ghana, Uganda, and Kenya), between 59 and 88 per cent of a large sample of households attributed their descent into poverty, and their inability to escape from it, primarily to ill health and health-related expenses (Krishna 2003; Krishna 2004; Krishna et al. 2004, 2005). Studies conducted on informal sector workers in Karnataka show a high incidence of health-related risk factors (Rajasekhar, Suchitra and Manjula 2007; Rajasekhar 2012).
[3] Some of the scholarly articles on Yeshasvini schemes are Aggarwal (2010) and Kuruvilla *et al* (2005).
[4] Accessed from the official website (http://yeshasvini.kar.nic.in/achieve.htm) on July 25, 2017.

cooperatives. The Department of Co-operation is implementing the scheme in all Karnataka districts.

Yeshasvini is, thus, social innovation that has been providing social protection to cooperative farmers in Karnataka for the last one-and-half decades. A study on the experience of this social innovation may provide valuable lessons. Hence, this paper addresses the following questions. What has been the process adopted in providing awareness on Yeshasvini? What is the level of awareness among farmer beneficiaries? What are the levels of enrolment across the socio-economic groups? What is the extent to which the health insurance benefits are utilised by farmers from cooperatives? How did the utilisation pattern influence the welfare of farmers?

In this paper, we discuss the implementation of Yeshasvini in the state with the help of data collected from the sample villages and households. The primary data were collected from three agro-climatically different types of districts; Urban (close to Bangalore city) (Bangalore Rural), agriculturally prosperous (Shimoga) and backward (Gulbarga). A semi-structured village questionnaire was used to have discussion on the implementation process (awareness campaigns in the village, enrolment process and utilisation status) of the scheme with key informants[5] from each of 60 sample villages..

The methodology to collect the primary data was the following. First, a list of households having membership in Yeshasvini scheme or those which have had membership in three years prior to the survey was collected for all the sample villages. If the number of member households was equal to or less than 15 in a village, all of them were selected. If more, a

[5] Included farmers and wage labourers in agriculture as well as officials such as Secretary of Cooperative Society, GP staff, etc.

sample of 15 households was randomly drawn. Data were collected from 552 sample households from 60 sample villages[6] through structured questionnaire. The information collected (in 2011) through this questionnaire includes basic household details such as caste, housing, access to drinking water, electricity and ration cards, income, etc., awareness among households on Yeshasvini scheme, experience with regard to enrolment and utilisation, and factors influencing the status of enrolment and utilisation.

As far as the profile of sample households is concerned, exactly 14 per cent of the households belonged to disadvantaged caste categories of SC/ST, while close to 60 per cent belonged to dominant and upper castes. Over 90 per cent of the sample households were residing in own (inherited) houses. Nearly 95 per cent had electricity connection. About 55 per cent of the households were having Below-Poverty Line; the proportion of households having Antyodaya card, sanctioned to the poorest, was however less than 5 per cent. Interestingly, over 40 per cent of them were possessing Above-Poverty Line cards. Thus, most of the sample households belonged to dominant caste groups and were better-off.

Table 1: Profile of the sample households

Particulars	Sample households (N=552)
SC/ST households (%)	14.0
Households (%) belonging to dominant and forward caste	58.9
Households (%) living in own house	91.6
Households (%) having electricity	94.9
Households (%) having Below-Poverty line card	54.5
Households (%) having Above-Poverty line card	40.4

[6] The average number of households covered per village is nine because in most of the sample villages the total number of households having membership (currently or in the immediate past) in Yeshasvini was much less than 15.

Awareness on Yeshasvini

Within the first two years of initiating Yeshasvini in the state, the scheme was started in about 64 per cent of the sample villages, and a couple of years later in the remaining villages Thus the scheme was in operation in the sample villages for 7-8 years at the time of the survey. The Credit Cooperative Society has taken the lead in the initiation of the scheme in most of the sample villages, while the Milk Cooperative Society has taken the lead to initiate the scheme in 28 per cent of the sample villages. It is in this context that the following questions are addressed: Who provided awareness on Yeshasvini in the sample villages? How was it provided? How were households motivated to join in the scheme?

Who provided awareness?

Discussions with key informants in sample villages revealed that, in Bangalore Rural, it was the secretary of the Milk Producers Cooperative Society (MPCS) who took the lead to provide awareness on the scheme in half of the villages. In the remaining villages, actors such as society members, Supervisor and Bank staff took part in spreading the awareness together with the secretary of MPCS. In Shimoga, it was the secretary of VSSN who provided awareness in almost all the villages together with his support staff, barring two villages where MPCS took the lead to initiate the scheme. In a majority of the sample villages of Gulbarga, it was the secretary of VSSN who took the lead in providing awareness on Yeshasvini, at times, with the help of members of the society and other staff. Key informants from one of the villages maintained that no information was provided to villagers. Thus, it is clear that where the MPCS is present, it is the secretary of MPCS who took the lead in providing the information. If there is no MPCS, it is the secretary of VSSN who provided the information to members of cooperative society.

This is corroborated by the data collected from the sample households. Over 93 per cent of the sample households have stated that they have heard about Yeshasvini from the secretary of MPCS or VSSN or the bank supervisor (Table 2).

Table 2: Distribution of sample households (%) by their response on 'from whom they heard of Yeshasvini'

Source of information	Bangalore Rural	Shimoga	Gulbarga	Total
Milk dairy / cooperative bank secretary	82.4	58.5	70.3	68.3
Bank supervisor	12.2	33.7	24.1	25.2
Notice board of co-operative society	0.7	3.3	0.6	1.8
Through TV, Newspaper, etc	0.0	0.8	1.3	0.7
Others	4.7	3.7	3.8	4.0
Total (Nos.)	148	246	158	552

Source: Primary data

How was the information provided?

Key informants from half of the villages in Bangalore Rural revealed that members of MPCS were given awareness when they went to milk collection centres to deliver milk. In some of the villages, information was provided in the monthly meetings or special meetings called for this purpose. Officials such as supervisor attended such meetings. The strategies of putting up the poster on the notice board, undertaking household visits and taking the help of SHGs have also been used. In Shimoga, information is mainly provided when members visit the credit cooperative society to take the loan, repay or reschedule the loan and any other such purpose. It was stated in a majority of the villages in Gulbarga that awareness on Yeshasvini is provided when society members visit to obtain a loan, repay or reschedule a loan, deliver milk or when people visit the office.

The chief driving factor in several villages was fixing of the target for enrolment. It was informed that usually a target is given to the secretary of VSSN, who will try to fulfil the target by motivating people visiting his office. If this does not succeed, the secretary is forced to visit

houses for this purpose. One of the secretaries of VSSN from Gulbarga stated that "a camp was held in the initial year. Now, people are aware of the scheme. Non members of Yeshasvini come to know from others. But, I have not provided any awareness in the last couple of years". It was revealed that this was the pattern in all the districts. A rigour in the provision of awareness, which was visible in the initial years, petered off as the years gone by. At the time of enrolment, if the secretary reaches the target easily through usual methods of asking those coming to deliver the milk or seeking loans, it is fine. Otherwise, he/she may undertake extra effort to mobilise membership, not necessarily by way of providing awareness on the scheme but through other means, as the discussion in the ensuing paragraph shows.

How were households motivated?

Members were motivated to join by conveying the message that the scheme would be handy when the household is compelled to provide treatment to major illnesses faced by its members. Members were also motivated by stating that treatment could be obtained from big, super speciality and expensive hospitals. The other important message was that the household could benefit from free treatment of up to Rs.2 lakhs with very small premium payment. It was informed that households, which previously obtained the benefit of free treatment, motivated others to join the scheme.

Key informants noted that the messages provided across the villages in Shimoga varied. In one of the villages, the key message was that "large amounts will be available for treatment if there is any major illness". In another village, it was "when there is a major illness requiring operation, you (the member) can obtain treatment with just Rs.150". In another village, the advantages of the scheme are highlighted by mentioning about amount of treatment available, coverage of 1,600 ailments, and treatment in very good hospitals. In one of the villages, it was

informed that “some people have registered with the hope that the card may be useful when faced with illnesses”.

In Gulbarga, members have been motivated to join in the scheme by highlighting the advantages such as treatment and surgeries up to Rs. 2 lakhs in very well known hospitals in return of just Rs. 150 per annum. Attention is also drawn to those who have already utilised the scheme. One of the secretaries stated that “we tell them that illnesses to which the card could be used for. Those who are interested will join and those not interested will not join”.

Key informants from several villages across the districts suggested in the open meetings that there was coercion on members of VSSN to join in the scheme. This suggestion was either refuted or accepted by the secretary of VSSN, who was present in most of these meetings. We will take up this issue for further discussion in the section on enrolment.

Level of awareness

If households have good knowledge on the scheme then they are more likely to enrol and utilise the scheme. Hence, an attempt is made to assess the awareness level by asking a series of specific questions on the scheme. The first question was on the key benefits from the Yeshasvini scheme. Over 90 per cent of the respondents stated that free surgeries in the big hospitals located in Bangalore city was the key benefit of the scheme. A few have stated that free treatment up to Rs. 2 lakhs is the key benefit. Only about one per cent of the households stated that they were not aware of the scheme. The sample households were thus aware of the key benefits in the programme.

When it came to awareness on the critical aspect of the maximum insurance coverage, only about 12 per cent of the households were aware of that the maximum coverage was Rs. 2 lakh per individual (Table 3). About 52 per cent, especially from the backward district (i.e. Gulbarga), stated that they were not aware of the maximum coverage. A significant proportion (23 per cent of the sample) provided incorrect answer that the maximum coverage was Rs. one lakh. Worse was that five percent of them thought that there was no limit at all!

Table 3: Distribution of Yeshasvini sample households (%) by their responses on the maximum insurance coverage provided in Yeshasvini

Maximum insurance coverage	Bangalore Rural	Shimoga	Gulbarga	Total
No limit	4.1	4.9	6.3	5.1
Rs.1 lakh per member	26.4	24.0	18.4	23.0
Rs.2 lakhs per member	12.2	12.6	10.1	11.8
Do not know	44.6	52.0	58.9	52.0
Others	12.8	6.5	6.3	8.2
Total (Nos.)	148	246	158	552

About 73 per cent of the sample households correctly stated that the members of cooperative societies or members of SHGs having bank linkages are eligible to receive the scheme benefits (Table 4). Some of the households were not aware of the eligibility criteria. Over 15 per cent of the sample households have provided incorrect response that all are eligible, while 8 per cent did not know the eligibility criteria.

Table 4: Distribution of Yeshasvini households (%) by their responses on 'the eligibility criteria for enrolment'

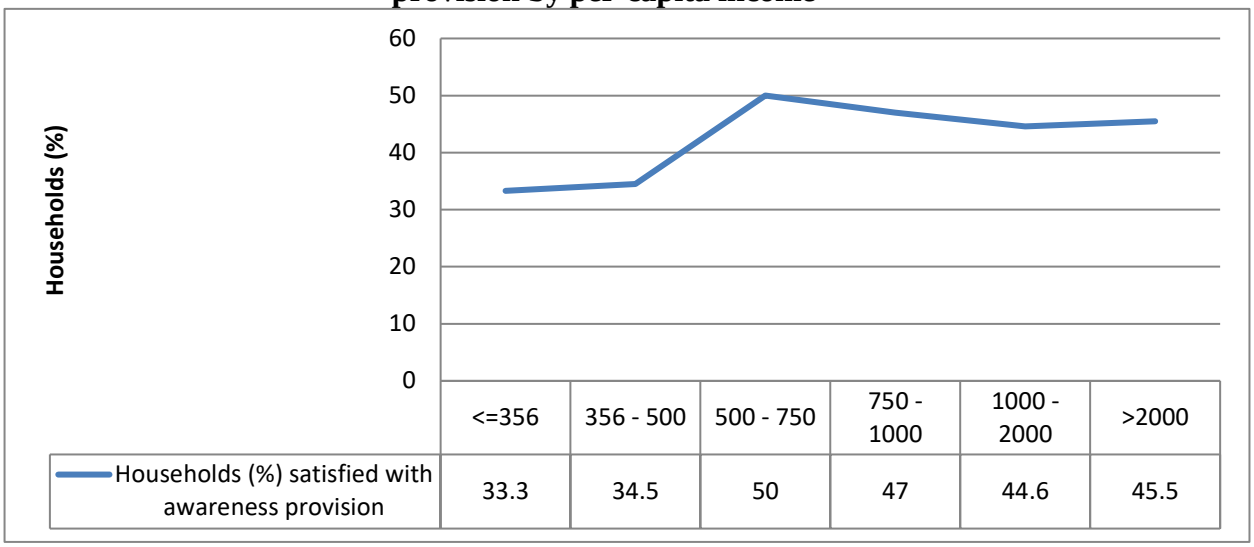
Responses on eligibility criteria	Bangalore Rural	Shimoga	Gulbarga	Total
All are eligible	19.9	10.6	18.7	15.4
Members of credit/ milk co-operative society	57.6	69.7	57.2	62.9
Member of SHG that has borrowed from bank/co-operative	9.3	12.2	10.2	10.9
Less than 75 years age	2.0	0.8	0.6	1.1
Others	2.6	0.0	2.4	1.4
Do not know	8.6	6.7	10.8	8.4
Total (No.)	148	246	158	552

Pre-existing diseases are covered by Yeshasvini; but, half of the sample households were unaware of this. The proportion of households not aware of this was relatively high in the backward district at 59 per cent.

Typically, beneficiary households were provided information in general terms that they would receive free treatment if they join in the scheme, and they can get surgeries done from very good hospitals. One respondent remarked that `we are aware that free operations are conducted. We do not know much about the scheme', while another stated that `we do not have proper information. We have enrolled because we were told that it will be useful to us'. Given that most of the households were informed about the scheme when they had gone to deliver the milk or repayment of loan at the VSSN, this is bound to happen as the officials could not have spent considerable time in explaining them about the scheme.

Cooperatives were thus not very successful in providing awareness on the scheme. Over 55 per cent of the sample households stated that they were not satisfied with the information provision. The level of satisfaction seems to be high among households with higher per capita income (Figure 1) thus implying that cooperatives were prioritising the better-off among members when it come to the information provision.

Figure 1: Proportion of households stating that they were satisfied with information provision by per-capita income



Enrolment

The membership in the scheme is voluntary. However, most co-operative societies in the initial years of implementation rendered membership automatic by paying the premiums on behalf of the members, thereby enrolling the members in the scheme. This could not be done subsequently as the membership fee was increased and there was stipulation that all the members of a household have to join in the scheme. As a result, the practice of automatic payment of premiums on behalf of members could not be done except perhaps in the case of MPCS.

With the help of village-wise data on Yeshasvini membership during the five-year (2006-07 to 2010-11) period, sample villages are distributed by trends in the membership. Only in 18.3 per cent of the villages was there an increase in membership. In one-third of the sample villages the membership has declined, while in 10 per cent of the villages it remained constant. The decline in membership was relatively high in the backward district. In 28 per cent of the villages information could not be obtained because data on enrolment at the village and primary

cooperative level was not maintained. This problem was particularly acute in those places where staff turnover was high.

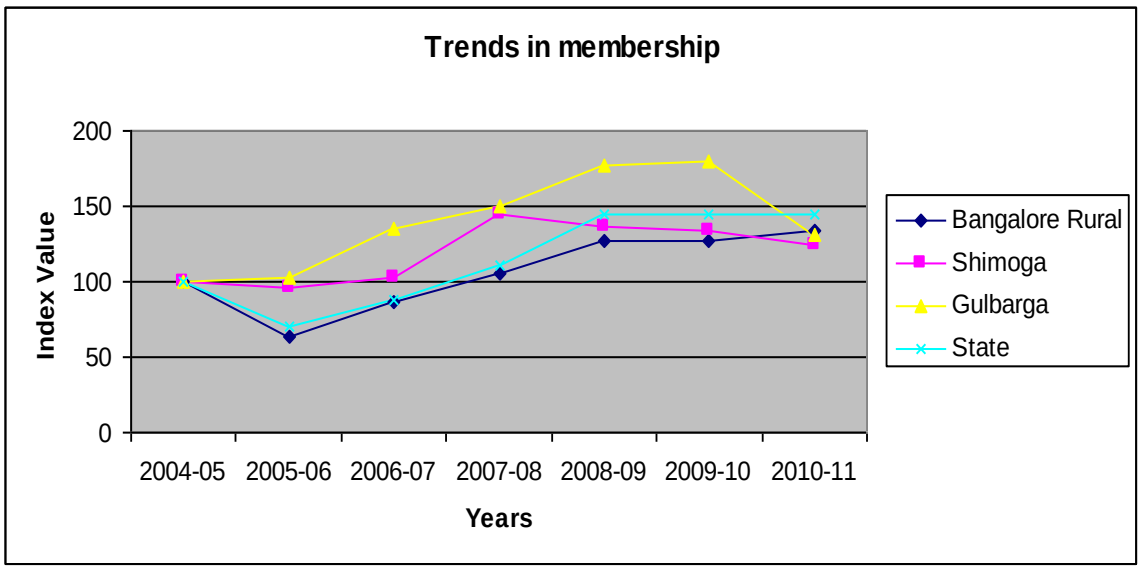
Table 5: Changes in the Yeshasvini Membership in the sample villages

Membership	Bangalore Rural		Shimoga		Gulbarga		Total	
	Number	%	Number	%	Number	%	Number	%
Increased	4	22.2	3	13.6	4	20.0	11	18.3
Remained constant	3	16.7	2	9.1	1	5.0	6	10.0
Declined	6	33.3	6	27.3	8	40.0	20	33.3
Fluctuated	3	16.7	2	9.1	1	5.0	6	10.0
No information	2	11.1	9	40.9	6	30.0	17	28.3
All villages	18	100.0	22	100.0	20	100.0	60	100.0

Source: Data collected from MPCS and VSSN in sample villages.

The above is confirmed by the data on Yeshasvini membership provided by the government. Barring Bangalore Rural, there has been a decline in the membership in Gulbarga, Shimoga as well as at the state level (Chart 2). It is to be noted that the decline has been sharp in Gulbarga district during 2010-11 due to the introduction of Arogyasri as a competing health insurance scheme in the district.

Chart 2: Indices of the Yeshasvini membership in the sample districts and the state



What are the reasons for these trends? We will provide the information collected from key informants and secretary of cooperative societies by sample districts in the ensuing paragraphs.

Villages from Bangalore Rural

In a Muslim dominant village from Bangalore Rural, several households have had membership in Yeshasvini in 2008-09. These households obtained membership as it was informed that free treatment could be obtained for illnesses. The enrolled households subsequently learnt that the scheme could be utilised only for surgeries for major illnesses. As there was no major health problem many households could not utilise the scheme. Subsequently, they have withdrawn membership. According VSSN secretary, households are of the view that `why should we pay Rs. 150 when we do not utilise the scheme'. This shows that the member households could not understand the concept of insurance.

The secretary of MPCS from a village in Bangalore Rural stated that since the society insisted that all the members of household should register, some of them have refused to renew their membership. It was found that only two households had membership in Yeshasvini from a Bangalore Rural village. Many households, having membership in MPCS and having enrolled for Yeshasvini, have withdrawn on the grounds that "we do not like this scheme. Why should all the family members have registration"? The secretary of MPCS, in order to meet the target for 2009-10, has paid membership fees from his own pocket. But, some of the enrolled members have refused to pay money to the secretary. Hence, he did not bother about target on enrolment in 2010-11.

The secretary of cooperative society from one of the villages in Bangalore Rural noted that two years ago, many households from this village were enrolled into the scheme. But, they did not renew their membership by stating that none of them could utilise the scheme. In addition,

according to the secretary, the Cooperative Bank has not shown much interest in providing awareness.

Villages from Shimoga

Of 125 households in a Shimoga village, only one had membership in the scheme. When asked for the reason, the secretary of VSSN stated that "in this village, most of the households derive sustenance from wage labour and hence, do not have membership in VSSN. Added to that, they do not have much awareness. The village is also served by SKDP's programme of Sampoorna Suraksha Yojana. Many poor households have membership in this scheme".

Only two out of 105 households from a Shimoga village have membership in Yeshasvini. When asked for the reasons, the Secretary of VSSN noted that "this is backward village. Most of the households migrate out in search of work in coffee estates. Added to that, not much awareness is there on Yeshasvini". The secretary also admitted that he does not have much contact with the households from this village; neither do they come to meet him at VSSN.

Only four out of 211 households are registered in Yeshasvini in another village. As the VSSN is located about 8 kms away from the village, the secretary noted that he does not have much contact with this village. He added that "if someone from this village comes to the VSSN, then we will provide awareness and ask them to join in the scheme. Otherwise, we will not bother about them".

Yeshasvini scheme does not have even one household in a small village consisting of 77 households in Shimoga district. According to the secretary of VSSN, the stipulation from the higher authorities that all members in a household should be compulsorily registered is not

liked by the people. He said that "We only have the option of deducting the premium amount from the loan sanctioned to a household. If we do that then they quarrel with us. Hence, we have not registered any household. We also feel bad of deducting amount of Rs.1,000 from a loan of Rs.10,000".

Villages from Gulbarga

Only 3 out of 188 households in a Gulbarga village are enrolled into Yeshasvini. When asked for the reasons, the Secretary of VSSN stated the following. "Higher officials of Yeshasvini have asked us to compulsorily enrol all the members of the household. When we tried to enrol all the household members and deduct the premium from the sanctioned loan, farmers started to quarrel with us. A household consisting of 5 members will have to pay Rs. 750 towards the premium. In a loan of Rs. 10,000, this is very significant amount. Hence, we stopped to enrol as this is becoming troublesome. We will only enrol those households which voluntarily come forward for registration".

One of the sample villages is located 22 kms away from Afzalpur town and taluk headquarters, and is close to the Maharashtra border. Although credit cooperative society is located in the village itself, only five out of about 540 households have membership in Yeshasvini. Of them, two households did not renew the membership as they are of the opinion that why to pay membership fees when they do not face any health problems. They are also of the opinion that payment of Rs. 150 is very high. The stipulation that all the members in a household should compulsorily have membership has made things difficult as large household size with 7 members will have to shell out as much as Rs. 1,050.

In this GP headquarter village from Gulbarga district, there are 722 households. Since this village is GP headquarters, the office of VSSN is given to another village located about 4 kms away. Only six out of 722 households, most of which are well-off and dealers of ration depot have availed membership of Yeshasvini. When asked the reasons for low number of enrolled households, it was informed by the Secretary of VSSN that "he has given very good information, and many households had enrolled in the scheme. However, the enrolled households did not have good experience with empanelled hospitals. Hence, many did not renew".

In a small village of 161 households from Gulbarga village, only five households obtained membership of Yeshasvini scheme. The VSSN, covering this village, is located at a distance of 16 kms. Further, the bus facility is also poor. In general, not much awareness is provided to the villagers on any government scheme including Yeshasvini scheme. Hence, only five households have membership.

In a Gulbarga village consisting of 144 households, only 11 have membership. The secretary of VSSN noted that he has been giving very good information to households. Even then, renewal rate has been coming down because of other insurance schemes such as Arogyasri are available. People would say that `we cannot survive by simply sticking to one scheme'.

The secretary of VSSN from one of the Gulbarga villages has noted that renewal is low in his jurisdiction because of the following reasons. First, the response from empanelled hospitals has not been very positive to the scheme. Faster treatment is not done in Yeshasvini. Second, the distant location of the VSSN coming in the way of regular interaction with the shareholders (one village is located as far as 15 kms away from the VSSN). Third, households face acute shortage of money to renew the membership on account of stipulation that all the household

members should have membership. Fourth, awareness on the scheme is also low. Fifth, Arogyasri has become a competing scheme as this scheme does not levy fee.

The renewal rate has been declining in this Gulbarga village. When asked for the reasons, key informants noted the following. "The membership fee for Yeshasvini has been going up every year by Rs. 10 to 15. But, treatment is not provided for minor ailments. How can all the households get diseases that warrant operation? It is rare for such major illnesses to occur. Hence, all the households are unanimous in stating that why should we spend Rs. 500 to Rs. 1000 per household. Even if we toil in the fields from morning to evening under the hot sun, we will get only Rs. 35. How can we simply pay Rs. 150 per person?"

Only two out of 691 households in a village from Gulbarga have membership in Yeshasvini. When the secretary was asked the reason for such a low enrolment, he replied that "households from this village are not interested to get enrolled in Yeshasvini. This is because of the stipulation that we have to enrol all the household members. He was told by the member households that if the society is particular then one person from a household can be enrolled. It is very expensive for all the members from a household to get enrolled". None of the members of MPCS from this village has enrolled in Yeshasvini in 2010. When asked for the reason, the secretary stated "after Arogyasri, we have stopped enrolment into Yeshasvini".

There are 154 households in this backward village from Gulbarga which is close to the border of Andhra Pradesh. One household had registered in 2009-10 and another in 2010-11. The household which had registration in 2009-10 underwent hernia operation; even then, the household did not renew. The secretary has the following reasons to offer: "People are of the opinion that this scheme is not useful. People do not have much awareness on the scheme.

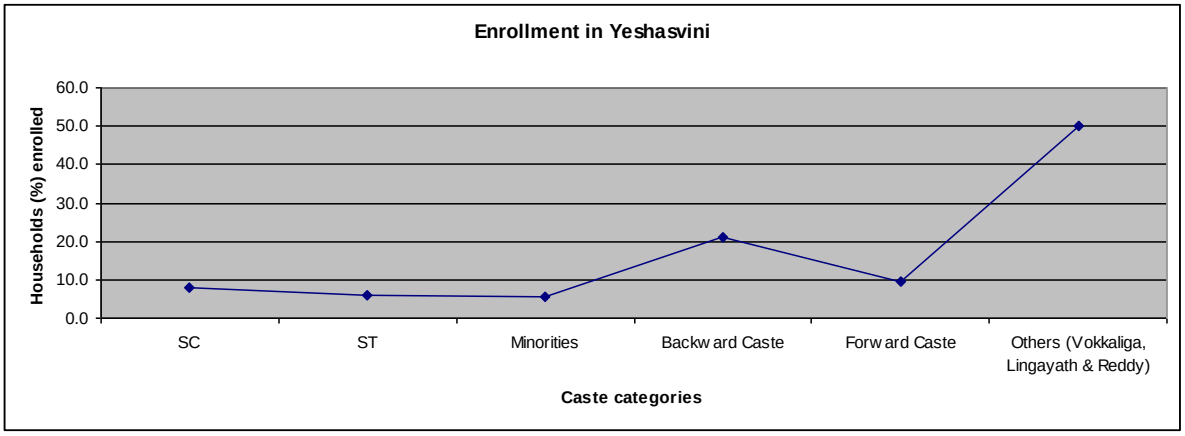
Since this is an interior and backward place, no official takes interest to come and provide awareness".

Four points emerge from the above discussion. First, the introduction of the rule that all the household members should compulsorily be enrolled into the scheme has not gone too well with the member households as this would mean more expenditure towards the membership fees. Because of this many households chose not to renew their membership. Second, the introduction of new health insurance scheme, namely, Arogyasri, where there is no membership fees, has influenced Yeshasvini member households to opt for Arogyasri. Third, the bad experiences with network hospitals forced some of the households to withdraw from the Yeshasvini scheme. Fourth, people perceive that although they pay premium of Rs. 150 per person, the scheme is applicable only to surgeries for major illnesses.

Membership among different categories

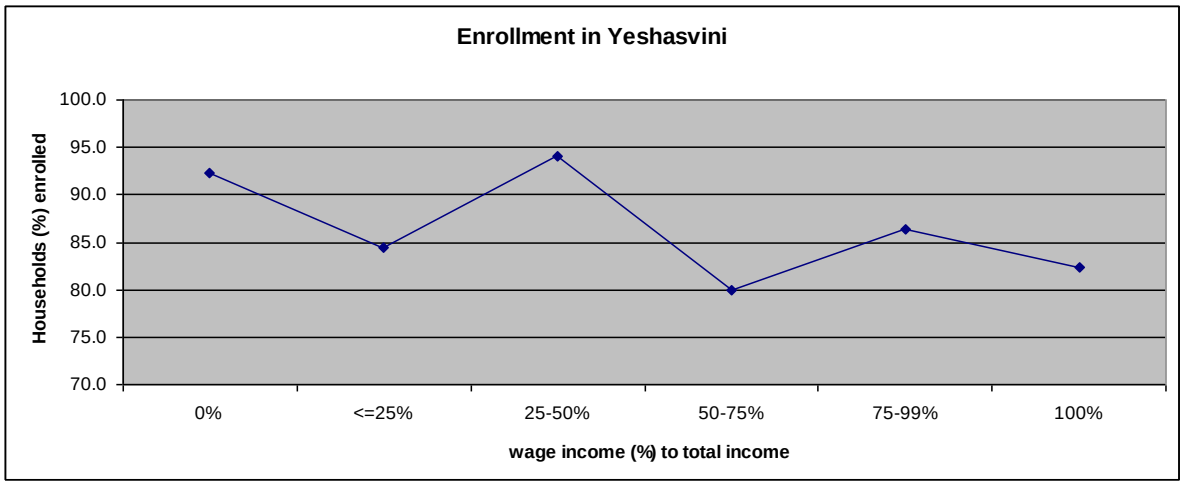
We will look at the enrolment patterns in this section by defining enrolment rate as the proportion of households having membership in the scheme to total households in 2010-11. About 91 per cent of the sample households stated that they had membership in the scheme in this year. As is evident from Figure 3, about 50 per cent of the enrolled households belonged to Vokkaliga, Lingayath and Reddy caste categories. The proportion of enrolled households belonging to SC, ST and minorities has been comparatively less.

Figure 3: Caste-wise distribution of enrolled households into Yeshasvini programme



The households which are highly dependent on wage labour income are comparatively less enrolled in the programme (Figure 4).

Figure 4: Enrolment rates among wage-labour dependent and non-wage labour dependent sample households



Membership among Household Members

Yeshasvini has made a rule that all the household members should become members in the scheme. Let us now see the extent to which this has been achieved. Table 5.21 shows that only between 53 and 59 per cent of the members of sample households across the selected districts were found to be having membership in Yeshasvini. Thus, although Yeshasvini scheme had made a rule that all the members in a household should compulsorily become

members, this has not been strictly followed in practice. Second, the proportion of men becoming members is comparatively high in all the districts.

Table 6: Distribution of members of Yeshasvini beneficiary households (%) by membership in the scheme and sex

Sex	Bangalore Rural			Shimoga			Gulbarga		
	Member	Non-Member	Total (Nos.)	Member	Non-Member	Total (Nos.)	Member	Non-Member	Total (Nos.)
Male	60.6	39.4	398	54.3	45.7	637	64.0	36.0	505
Female	51.3	48.7	376	52.1	47.9	630	53.4	46.6	444
Total	56.1	43.9	774	53.2	46.8	1267	59.0	41.0	949

To which age group do enrolled household members belong? It is evident from Table 5.22 that most of the enrolled members belong to the age group of 17 to 50 years. Second, the proportion of enrolled persons is less than the total in the case of age groups of less than 6 years, 6 to 17 years and 17 to 35 years. In the case of the other age groups, the reverse is the case. Here, the proportion of enrolled persons is more than the total. This implies that sample households prefer to enrol older members of the households as it is perceived that they would be more prone to illnesses. This is moral hazard behaviour which needs to be addressed by the government.

Table 7: Distribution of members of Yeshasvini beneficiary households (%) by membership in the scheme and age

Age group (in years)	Bangalore Rural			Shimoga			Gulbarga		
	Member	Non-Member	Total	Member	Non-Member	Total	Member	Non-Member	Total
< 6	2.8	17.6	9.3	1.8	16.7	8.8	4.6	27.2	13.9
6 to 17	11.5	26.5	18.1	9.5	23.1	15.9	14.3	20.3	16.8
17 to 35	33.2	33.8	33.5	28.0	40.0	33.6	36.8	33.7	35.5
35 to 50	31.1	12.4	22.9	28.8	8.6	19.3	22.1	8.7	16.6
50 to 65	15.2	5.0	10.7	23.3	5.9	15.2	17.1	5.4	12.3
65 & above	6.2	4.7	5.6	8.6	5.7	7.3	5.0	4.6	4.8
Total **(Nos.)**	434	340	774	674	593	1267	560	389	949

Utilisation

Members of Yeshasvini could avail free treatment from the empanelled hospitals for a large number of diseases. We have asked a question on whether the households obtained the

treatment after they have obtained membership in Yeshasvini. Table 8 shows that about 20 per cent of the sample households have utilised the scheme after becoming the members while the rest could not utilise the scheme for obtaining the treatment. It is to be noted that this utilisation rate does not pertain to one-year before the survey rather it is for the entire duration of membership.

Table 8: Distribution of sample households (%) by whether they have utilised Yeshasvini scheme

Whether utilised the scheme	Bangalore Rural	Shimoga	Gulbarga	Total
Yes	10.1	23.2	25.3	20.3
No	89.9	76.8	74.7	79.7
Total	148	246	158	552

The important reason for not utilising the programme, as reported by sample household, was that the need for utilisation did not arise among them (Table 9). Interestingly, although the scheme has been in operation for the last eight years, some households stated that lack of awareness on the network hospitals hindered the utilisation. There were also a few cases, especially in Gulbarga, wherein it was stated that the empanelled hospitals have denied the free treatment on some ground or the other.

Table 9: Distribution and Households (%) by their responses on factors influencing the utilisation of Yeshasvini benefits

Reasons for not utilising	Bangalore Rural	Shimoga	Gulbarga	Total
Need to use the card did not arise	87.2	91.0	83.1	87.7
Lack of awareness on which hospital to go	4.5	1.6	5.1	3.4
Not aware of diseases for which the card can be used	0.8	1.1	0.8	0.9
Empanelled hospital denied free treatment	2.3	1.6	3.4	2.3
Health condition not covered in the scheme	1.5	1.1	1.7	1.4
Others	3.8	3.7	5.9	4.3
Total (Nos.)	133	189	118	440

Welfare Loss

Low utilisation does not mean that people did not face any health problem. Table 10 shows that 32.2 per cent of the sample households stated that they faced at least one major health problem during the reference period of one year before the date of survey. This does not go well with the fact that many households had reported that the need to utilise the Yeshasvini scheme did not arise. This can be explained as follows. When sample households reported that the need to utilise the card did not arise they meant that the need for surgeries did not arise. However, they still faced major health problems but they were unaware whether these could be treated at the empanelled hospitals.

Table 10: Distribution of Yeshasvini sample households (%) by number of major health shocks faced by them during the last one year

Number of major health problems faced during reference period	Districts			Total
	Bangalore Rural	Shimoga	Gulbarga	
Zero	71.6	62.6	58.9	63.9
One	25.7	33.7	36.1	32.2
Two	2.7	3.3	5.1	3.6
Three	0.0	0.4	0.0	0.2
Total (Nos.)	148	246	158	552

The households, that had faced at least one major crisis, visited different types of hospitals to obtain treatment. Most of them visited private hospitals (especially in Gulbarga) to obtain treatment for health problems (Table 11). The dependence on government hospital is low in Gulbarga. About 30 per cent of the households have depended on hospitals that have been empanelled under Yeshasvini for obtaining treatment. Such dependence has been somewhat high in Gulbarga and Shimoga districts.

Table 11: Distribution of health problems (%) by the place of treatment

Where did the HHs got treatment for the health problems	Bangalore Rural	Shimoga	Gulbarga	Total
PHC	2.2	0.0	0.0	0.5
Government hospital	17.4	9.8	2.7	9.0
Private clinic	15.2	7.8	0.0	6.8
Private hospital	52.2	49.0	58.9	52.9
Network/ empanelled hospital of Yeshasvini	10.9	32.4	38.4	29.9
Others	2.2	1.0	0.0	0.9
Total number of health problems	**46**	**102**	**73**	**221**

What is interesting from Table 12 is that though the dependence on network hospitals is relatively low as compared to private hospitals, the average expenditure has been substantial in the case of former, especially in Shimoga and Gulbarga. The total expenditure has been high among private hospitals than that of empanelled hospitals, but the average expenditure has been high for network hospitals.

Table 12: Total and average expenditure by different place of treatment

Place of treatment	Bangalore Rural		Shimoga		Gulbarga		Total	
	Total expenditure (Rs.)	Average expenditure (Rs.)	Total expenditure (Rs.)	Average expenditure (Rs.)	Total expenditure (Rs.)	Average expenditure (Rs.)	Total expenditure (Rs.)	Average expenditure (Rs.)
PHC	20	20	0	0	0	0	20	20
Govt hospital	56000	7000	532000	53200	1000	500	589000	29450
Private clinic	31300	4471	107500	13438	0	0	138800	9253
Private hospital	786900	32788	1251000	25020	1366000	31767	3403900	29093
Network/ empanelled hospital	35000	7000	1445000	43788	1408905	50318	2888905	43771
Others	500	500	10000	10000	0	0	10500	5250
Total	909720	19777	3345500	32799	2775905	38026	7031125	31815

There is need to analyse the following questions to ascertain the welfare loss. How much of health expenditure incurred at network hospitals has been reimbursed through Yeshasvini scheme? How much of health expenditure was borne by the households? How did they mobilise money to meet the expenditure on their own? Of the total expenditure of Rs. 54.45 lakhs incurred by the sample households, 49 per cent was incurred at private hospitals, 41 per cent

of the expenditure at empanelled hospitals, 8 per cent in government hospitals and 2 per cent in private clinics (Table 13). But, not the entire expenditure incurred at empanelled hospitals was reimbursed by Yeshasvini. Of Rs. 28.89 lakhs of health expenditure at empanelled hospitals, 54.5 per cent was reimbursed by empanelled hospitals and the rest was borne by the households. Overall, the contribution of Yeshasvini was to the extent of 22.5 per cent of the total expenditure on health care by sample households.

Table 13: Contribution of Yeshasvini

Place of treatment	Bangalore Rural			Shimoga			Gulbarga			Total		
	Total expenditure (Rs.)	Amount reimbursed through the Yeshasvini scheme (Rs.)	Amount borne by the household (Rs.)	Total expenditure (Rs.)	Amount reimbursed through the Yeshasvini scheme (Rs.)	Amount borne by the household (Rs.)	Total expenditure (Rs.)	Amount reimbursed through the Yeshasvini scheme (Rs.)	Amount borne by the household (Rs.)	Total expenditure (Rs.)	Amount reimbursed through the Yeshasvini scheme (Rs.)	Amount borne by the household (Rs.)
PHC	20	0	20	0	0	0	0	0	0	20	0	20
Govt hospital	56000	0	56000	532000	0	532000	1000	0	1000	589000	0	589000
Private clinic	31300	0	31300	107500	0	107500	0	0	0	138800	0	138800
Private hospital	786900	0	786900	1251000	0	1251000	1366000	0	1366000	3403900	0	3403900
Network/ empanelled hospital	35000	21000	14000	1445000	685000	760000	1408905	867700	541205	2888905	1573700	1315205
Others	500	0	500	10000	10000	0	0	0	0	10500	10000	500
Total	909720	21000	888720	3345500	695000	2650500	2775905	867700	1908205	7031125	1583700	5447425

How was the money mobilised by the sample households? The answer to this question is presented in Table 14. Nearly half of them had fallen back on their savings to meet their HH health expenditure. Quite a few households (30.4%) in Bangalore rural had borrowed money from relatives and friends. Dependence on moneylenders/ pawn brokers has been relatively low when compared to Arogyasri and RSBY sample. This corroborates with earlier finding that the Yeshasvini sample households are relatively better-off.

Table 14: Distribution of health problems (%) by source of meeting the expenditure										
District	Sources of meeting the expenditure									Total no. of cases
	Own sources	Money lenders/ Pawn brokers	Relatives and friends	Partially own sources & partially Yeshasvini	Partially money-lenders & partially Yeshasvini	Partially relatives/ friends & partially Yeshasvini	Fully covered by Yeshasvini	Other insurance covered	Free treatment	
Bangalore Rural	45.7	13.0	30.4	4.3	0.0	2.2	2.2	0.0	2.2	46
Shimoga	45.1	19.6	3.9	11.8	8.8	0.0	9.8	1.0	0.0	102
Gulbarga	41.1	24.7	0.0	15.1	4.1	0.0	12.3	1.4	1.4	73
Total	**43.9**	**19.9**	**8.1**	**11.3**	**5.4**	**0.5**	**9.0**	**0.9**	**0.9**	**221**

Conclusions

Yeshasvini is a social innovation to provide social protection to cooperative farmers in Karnataka. The processes and outcomes relating to the provision of awareness, enrolment and utilisation of the Yeshasvini scheme are discussed in this paper with the help of data collected from large number of sample households. In the sample districts, the membership in Yeshasvini was more skewed towards the households belonging to dominant castes of Vokkaliga, Lingayath and Reddy. The member households of Yeshasvini are also relatively better-off.

Initiation of the scheme in the sample villages has been mainly by credit cooperative societies in Gulbarga and Shimoga districts, while in Bangalore Rural milk cooperative society has taken the initiative in spreading the awareness. In general, the awareness on Yeshasvini scheme among the sample households was better, though some of them were not aware of the exact features of the programme. This is further corroborated by the fact that over half of the sample expressed dissatisfaction with the provision of information on Yeshasvini scheme. This proportion was relatively high among lower income households.

As far as the enrolment in the programme is concerned, in the initial years the membership had increased. However, in the subsequent years there was a decline in the membership especially

in Gulbarga district. One of the important reasons for the decline in the enrolment was due to higher membership fees. The enrolment rate has further declined in Gulbarga after the introduction of the Arogyasri programme, for which there is no membership fees!

Only 20 per cent of the sample households have utilised the scheme. Interestingly, although the scheme has been in operation for eight years at the time of survey, some households stated that lack of awareness on the network hospitals came in the way of utilisation of the programme. When we look at the amount spent on the health expenditure, the average expenditure has been substantial in the case of network hospitals, though the dependence on them is relatively low as compared to private hospitals. Overall, about 23 per cent of the total health expenditure was reimbursed by the Yeshasvini scheme. This implies that 77 per cent of the health expenditure was borne by the member despite having membership in Yeshasvini. The households have depended on their own sources to meet the health expenditure.

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